GRUNDIG

CTV Service Manual

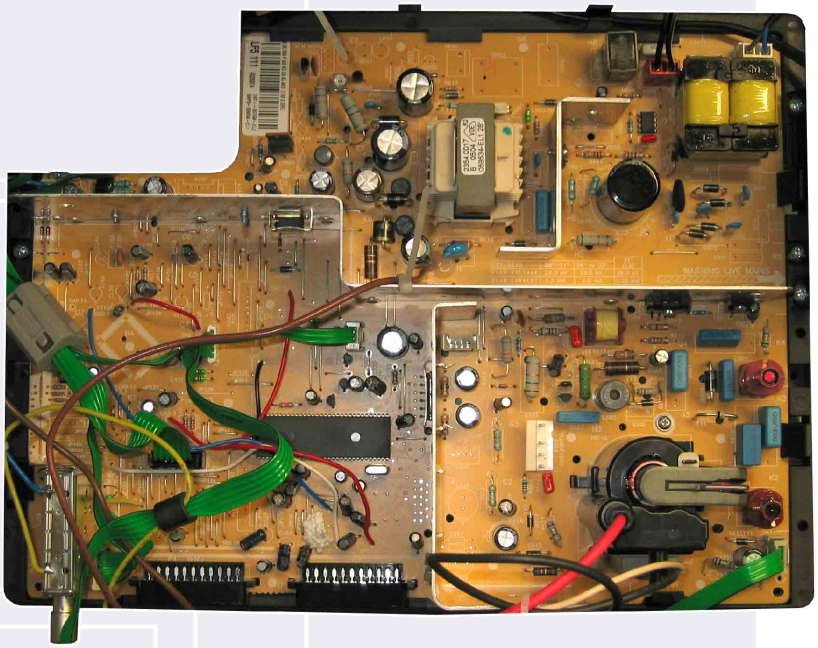
Chassis 14.2

GREENVILLE 7008/5 TOP

GBB3800

SEDANCE 70
ST 70-2405/5 TOP

GBB4400



Zusätzlich erforderliche Unterlagen für den Komplettservice
Additionally required Service Documents for the Complete Service

Service Manual

Sicherheit Safety

Materialnr./Part No. 720108000001

Materialnummer/Part Number 720100500000
Änderungen vorbehalten/Subject to alteration
H-S41 0304
http://www.grundig.com

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000001, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000001, as well as the respective national deviations.

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Allgemeiner Teil

Allgemeine Hinweise

Vor dem Öffnen des Gehäuses den Netzstecker ziehen!

Achtung: ESD-Vorschriften beachten

Leitungsverlegung
Bevor Sie die Leitungen und insbesondere die Masseleitungen lösen, muss die Leitungsverlegung zu den einzelnen Baugruppen beachtet werden.
Nach erfolgter Reparatur ist es notwendig, die Leitungsführung wieder in den werkseitigen Zustand zu versetzen um evtl. spätere Ausfälle oder Störungen zu vermeiden.

Durchführen von Messungen
Bei Messungen mit dem Oszilloskop an Halbleitern sollten Sie nur Tastköpfe mit 10:1 - Teiler verwenden. Außerdem ist zu beachten, dass nach vorheriger Messung mit AC-Kopplung der Koppelkondensator des Oszilloskops aufgeladen sein kann. Durch die Entladung über das Messobjekt können Bauteile beschädigt werden.

Messwerte und Oszillogramme
Bei den in den Schaltplänen und Oszillogrammen angegebenen Messwerten handelt es sich um Näherungswerte!

General Section

General Notes

Before opening the cabinet disconnect the mains plug!

Attention: Observe the ESD safety regulations

Wiring
Before disconnecting any leads and especially the earth connecting leads observe the way they are routed to the individual assemblies. On completion of the repairs the leads must be laid out as originally fitted at the factory to avoid later failures or disturbances.

Carrying out Measurements
When making measurements on semi-conductors with an oscilloscope, ensure that the test probe is set to 10:1 dividing factor. If the previous measurement was made on AC input, please note that the coupling capacitor in the oscilloscope will be charged. Discharge via the item being checked can damage the components.

Measured Values and Oscillograms
The measured values given in the circuit diagrams and oscillograms are approximates!

Sicherheits-Hinweise

Die in den Fernsehgeräten auftretende Röntgenstrahlung entspricht den Bestimmungen der Physikalisch-Technischen Bundesanstalt vom 8. Januar 1987.
Die Hochspannung für die Bildröhre und die damit auftretende Röntgenstrahlung ist abhängig von der exakten Einstellung der Netzteilspannung +B.
Nach jeder Reparatur im Netzteil oder in der Horizontalablenkung ist die Hochspannung zu messen und gegebenenfalls einzustellen.
Schutzschaltungen im Gerät dürfen nur kurzzeitig außer Betrieb gesetzt werden, um Folgeschäden am Chassis oder an der Bildröhre zu vermeiden.
Beim Austausch der Bildröhre dürfen nur die in den Ersatzteillisten vorgeschriebenen Typen verwendet werden.

Safety Advices

The X-radiation developing in the sets conforms to the X-radiation Regulations (January 8, 1987), issued by the Physikalisch-Technische Bundesanstalt (federal physiotechnical institution).
The high tension for the picture tube and thus the developing X-radiation depends on the precise adjustment of the +B power supply.
After every repair of the power supply unit or the horizontal deflection stage it is imperative that the EHT for the picture tube is checked and re-adjusted if necessary.
To avoid consequential damages to the chassis or the picture tube the integrated protective circuits are allowed to be put out of operation only for a short time.
When replacing the picture tube use only the types specified in the spare parts lists.

Technische Daten / Technical Data

	Greenville 7008/5 TOP	**SEDANCE 70 ST 70-2405/5 TOP**
CHASSIS	14,2 SX	14,2 SX
Order Number	GBB3800	GBB4400
EAN	40 13833-59243 3	40 13833-59250 1
Color	black	procon silver
Destination	D,N,S,DK	D,A,CH,I,NL,P,S,N,DK,ROW
User manual languages	D,N,S,DK	D,I,NL,DK,N,S,P,GB
CHASSIS TYPE	50Hz / 110°	50Hz / 110°
SOUND	STEREO	STEREO
REMOTE CONTROL	Tele Pilot 160C	Tele Pilot 160C
PICTURE		
Picture tube	28"(4:3)	28"(4:3)
100 Hz Digital	○	○
Flicker free scanning (full frame memory)	○	○
Digital CTI	○	○
Digital Combfilter	○	○
Digital Luminance Transition Improvement (DLTI)	○	○
Picture Noise reduction	○	○
SVM (Scan Velocity Modulation)	○	○
Dynamic Focus	○	○
Preset picture modes(soft,natural,rich,user)	●	●
Tilt (rotation)	○	○
Picture Formats	Auto (WSS) / 16:9 / 4:3	Auto (WSS) / 16:9 / 4:3
PIP (2 Tuner)	○	○
Multifold Tuner scan (Mosaic Picture)	○	○
PAT: Split screen (PICTURE + TXT)	○	○
PAP: Double window (PICTURE+PICTURE)	○	○
P^2AT: Double window + TXT	○	○
Picture freezing	○	○
POP: PICTURE on PICTURE	○	○
Zoom with point function	○	○
Auto 16:9 selection via scart	●	●
Sharpness Control	●	●
Blue Back	●	●
SOUND		
Mono/A2Stereo/NICAM	●/●/●	●/●/●
AV Stereo	●	●
Dolby Virtual	○	○
Subwoofer (20 W max.)	○	○
Dynamic Bass	●	●
DSP (Digital Sound Proccesor)	●	●
Balance Adjustment	●	●
Automatic Volume Leveling (AVL)	●	●
PIP listening via Hp.jack	○	○
5.band Graphic Equalizer	●	●
Space Sound Effect	●	●
Preset Sound Modes (cinema,music,sport,speech,user)	●	●
Sound output (RMS)	2*10W	2*10W

	Greenville 7008/5 TOP	SEDANCE 70 ST 70-2405/5 TOP
TUNING		
PLL Frequncy Synthesize	●	●
Automatic Tuning System with country selection	●	●
Frequency Based Auto Search	○	○
Automatic Micro-search	●	●
Automatic Programing	○	○
Manual fine tuning	●	●
Direct channel selection	●	●
PAL/BG	●	●
NTSC-Playback via scart (3,58/4,43)	●	●
PAL M/N NTSC M	○	○
Cabel TV / Hyperband (S1-S41)	●	●
CONNECTIONS		
Euro-scart socket 1 (CVBS+RGB)	●	●
Euro-scart socket 2 (CVBS+S-VHS)	●	●
Euro-scart socket 3	○	○
Audio /Video in (Front or Side)	●	●
S-VHS cinch (Front orSide)	○	○
Audio Back out (Line out)	○	○
Headphone jack menü with full sound adjustments	●	●
Aerial Input	●	●
S.VHS via Scart	●	●
Display of other inputs while copy function	○	○
ELECTRONIC		
µ-Processor	Philips UOC OM836x	Philips UOC OM836x
Manual & automatic labelleng of prog.(5 chracters)	●	●
Programmable off timer	●	●
Programmable on timer	●	●
Intelligent Channel search (Zapping function)	○	○
Programme Edit	●	●
Intelegent Programme Switch	●	●
Auto switch off	●	●
Programme memory TV/AV (opt.)	100/AV	100/AV
Teletext/Fastext/Toptext	10/7/7 pages / Level 1.5	10/7/7 pages / Level 1.5
Teletext options	○	○
Childlock	●	●
Menu languages OSD	D-DK-GB-I-N-NL-P-S	D-DK-GB-I-N-NL-P-S
Zapp (Recall function)	●	●
Service mode	●	●
Game	○	○
Hotel mode	○	○
POWER SUPPLY / CABINET		
Voltage / frequency	230/50Hz	230/50Hz
Power consumption (IEC 62087-2002)	75W	75W
Power consumption Standby	3W	3W
Cabinet (WxHxD)	80,0 x 57,3 x 47,7cm	80,0 x 57,3 x 47,7cm
Weight	approx. 35kg	approx. 35kg

Bedienhinweise

Dieses Kapitel enthält Auszüge aus der Bedienungsanleitung.

Weitergehende Informationen entnehmen Sie bitte der gerätespezifischen Bedienungsanleitung, deren Materialnummer Sie in der entsprechenden Ersatzteilliste finden.

AUF EINEN BLICK

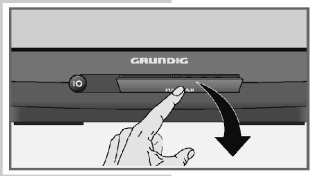
Die Fernbedienung

⏻	Schaltet das Fernsehgerät ab (Stand-by).
PIP	Taste ohne Funktion.
⇔	Schaltet das Bildformat um (4:3 ↔ 16:9).
-/--	Schaltet zwischen ein- und zweistelligen Programmplätzen um; schaltet auf doppelte Zeichengröße im Videotext-Betrieb.
0...9	Schaltet das Fernsehgerät aus Stand-by ein; wählt Programme direkt.
🔇	Ton ein/aus (stummschalten).
i	Ruft das Menü auf; im Menü eine Seite zurück.
z	Schaltet um zwischen den beiden zuletzt gesehenen Programmen.
P+, P-	Schalten das Fernsehgerät aus Stand-by ein; wählen Programme schrittweise; bewegen Cursor nach oben/unten.
◀ ▶	Ändern die Lautstärke; bewegen Cursor nach links/rechts.
OK	Ruft die Programmbelegung auf; aktiviert verschiedene Funktionen.
TXT	Schaltet um zwischen Videotext-Betrieb und TV-Betrieb; Menü ausblenden.
AV	Wählt AV-Programmplätze und das zuletzt gesehene Fernseh-Programm.
SCAN	Antwortfreigabe im Videotext-Betrieb.
PAP	Seitenstop im Videotext-Betrieb.
SIZE	Wählt Unterseiten im Videotext-Betrieb.
POS	Aktualisiert eine Seite im Videotext-Betrieb.

AUF EINEN BLICK

👁	Wählt verschiedenen Bildeinstellungen an; blättert im Videotext-Betrieb eine Seite zurück.
🕘	Uhrzeit ein/aus; blättert im Videotext-Betrieb zur nächsten Seite.
▯▯	Wählt gewünschtes Kapitel im Videotext-Betrieb.
👂	Wählt verschiedenen Toneinstellungen an; wählt gewünschtes Thema im Videotext-Betrieb.
VCR, SAT DVD	Schaltet auf die Bedienung eines GRUNDIG Videorecorders, GRUNDIG Satelliten-Receivers oder GRUNDIG DVD-Players. Entsprechende Taste (»**VCR**«, »**SAT**«, »**DVD**«) gedrückt halten. Anschließend gewünschte Taste drücken. **Hinweis:** Welche Funktionen Sie ausführen können, hängt von der Ausstattung des Gerätes ab. Probieren Sie es einfach aus.

Die Vorderseite des Fernsehgerätes



IO	Schaltet das Fernsehgerät in Stand-by und wieder aus.
– ◢ +	Verändern die Lautstärke.
– P +	Programmwahl; schalten das Fernsehgerät aus Stand-by ein.
L AUDIO IN R	Tonsignaleingang für Camerarecorder.
VIDEO IN	Bildsignaleingang für Camerarecorder.
🎧	Kopfhöreranschluss (3,5 mm ø Klinke).

Operating Hints

This chapter contains excerpts from the operating instructions.

For further particulars please refer to the appropriate user instructions the part number of which is indicated in the relevant spare parts list.

OVERVIEW

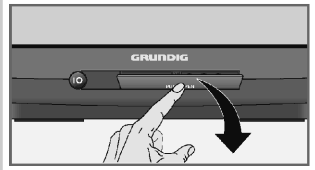
The remote control

⏻	Switches off the television set (stand-by)
PIP	Key has no function.
▭	Switches between picture formats
-/--	Switches between single and double-digit preset channels Switches to double character size in teletext mode
0...9	Switches the television on from standby mode Selects channels directly
🔇	Sound on/off (mute)
i	Opens the menu Switches to previous menu page
z	Switches between the two most recently viewed channels
P+, P-	Switches the television on from standby Selects stations step by step Moves the cursor in the menus up and down
◀ ▶	Adjusts the volume Moves the cursor left/right
OK	Calls up the preset channels Activates various functions
TXT	Switches between teletext and TV modes Hides the menu
AV	Selects the AV channels and the most recently viewed television channel
SCAN	Reveal answer in teletext mode
PAP	Page stop in teletext mode
SIZE	Selects the sub-pages in teletext mode
POS	Updates a page in teletext mode

OVERVIEW

👁	Selects various picture settings Scrolls back a page in teletext mode
🕘	Time on/off Scrolls to the next page in teletext mode
▯▯	Freeze-frame Selects the desired chapter in teletext mode
👂	Selects various audio settings Selects the desired topic in teletext mode
VCR, SAT DVD	Switches to operating a GRUNDIG video recorder, a GRUNDIG satellite receiver or a GRUNDIG DVD player Keep the relevant buttons (»**VCR**«, »**SAT**«, »**DVD**«) pressed down. Then press the button you require. **Note:** The functions available to you depend on the model of the device you are using. Just try it out.

The front of the television set



IO	Switches the television into and out of standby mode
– ◢ +	Adjusts the volume
– P +	Channel selection Switches the television on from stand-by
VIDEO IN	Video signal input for camcorder
L AUDIO IN R	Audio signal input for camcorder
🎧	Headphone jack (3.5 mm ø jack plug)

Service- und Sonderfunktionen

Service Mode aktivieren: Taste " i " (Hauptmenü) drücken –> Service Code "8500" eingeben.
Service Mode beenden: Taste "TXT" drücken.

1. Grundeinstellwerte
Folgende Tabelle zeigt alle typenbezogenen Grundeinstellungen im Service Mode. Alle mit * gekennzeichneten Werte müssen zusätzlich nach Abgleich (Seite 2-1) eingestellen werden.

Service and Special Funktions

Start of the Service Mode: Press button " i " (Main Menu) –> Enter Service Code "8500".
End the Service Mode: Press button "TXT".

1. Basic Settings
The following table shows all type specific basic settings in the service mode. In addition all values marked with * must be adjusted according to adjustment (page 2-1).

Menüpunkt Point of Menu P+ / P–	Einstellung Adjustment ◀ / ▶	Hinweis Hint	SEDANCE 70 ST 70-2405/5 TOP	GREENVILLE 7008/5
TUNER	TEMIC	eingebauten Tuner wählen select used tuner		
	PANASONIC			
	SHARP			
	PHILIPS (Thomson)			
AGC	siehe Abgleich / see Adjustment		14*	14*
STD	STBY-On	Netzschalter-Ein –> Standby power switch ON –> standby	X	X
	STBY-Off			
EEPE	00		X	X
	01	EEPROM-Reset		
PEAK	siehe Abgleich / see Adjustment	Bildschärfe / Peaking	32	32
HEAD	YES	Kopfhörer / Headphone	X	X
	NO			
SCRN	ON	benötigt für Schirmgitter-Abgleich used for screen adjustment		
	OFF		X	X
GRN	siehe Abgleich / see Adjustment	Grün-Pegel / Green level	32*	32*
RED	siehe Abgleich / see Adjustment	Rot-Pegel / Red level	40*	40*
BLUE	siehe Abgleich / see Adjustment	Blau-Pegel / Blue level	34*	34*
BLOG	siehe Abgleich / see Adjustment	Grün / Green cut off	32*	32*
BLOR	siehe Abgleich / see Adjustment	Rot / Red cut off	36*	36*
YDLY		Luminanz-Verzögerung / Luminance delay	4	4
SAT		Farbsättigung / Saturation	20	20
HUE		Bildschärfe / Sharpness	32	32
CON		Kontrast / Contast	40	40
CDR		Kathode-Pegel / Cathode drive level	5	5
BRI		Helligkeit / Brightness	32	32
EWT	siehe Abgleich / see Adjustment	Ost/West Trapez / East West Trapezium	28*	28*
EWCU	siehe Abgleich / see Adjustment	Ecken oben / Upper corner	32*	32*
EWCL	siehe Abgleich / see Adjustment	Ecken unten / Lower corner	32*	32*
EWPW	siehe Abgleich / see Adjustment	Ost/West Parabel 4:3 / East west parabola width 4:3	17*	17*
HSHT	siehe Abgleich / see Adjustment	Bildposition horizontal / Horizontal shift	35*	35*
EWW	siehe Abgleich / see Adjustment	Bildbreite / Horizontal width	60*	60*
VAMP	siehe Abgleich / see Adjustment	Bildhöhe / Vertical amplitude	46*	46*
SCOR	siehe Abgleich / see Adjustment	S-Korrektur / S correction	25*	25*
VSHT	siehe Abgleich / see Adjustment	Bildposition vertikal / Vertical shift	29*	29*
VSLP	siehe Abgleich / see Adjustment	Bildmitte / Vertical slope	32*	32*
AV	01	1 Scart		
	03	2 Scart		
	04	2 Scart + Front-AV	X	X
	05	2 Scart + Front-AV + SVHS		
RGB	siehe Abgleich / see Adjustment	OSD Helligkeit / Brightness	1*	1*
VZOM	siehe Abgleich / see Adjustment	Vertikal Zoom / Vertical zoom	39*	39*
SSTD	BG-ONLY		X	X
	I-ONLY			
	BG + DK			
	BG + LL'			
	ALL SYS.			
STYP	NICAM On		X	X
	NICAM Off			
TOPTEXT	YES		X	X
	NO			
TXT table	WEST	verfügbare Texttabellen sind abhängig von der Software available text tables are depending from software		
	EAST			
	CYRI			
	GREEK			
	AUTO		X	X
PWLT	siehe Abgleich / see Adjustment	Strahlstrombegrenzung / Peak white limiting	11*	11*

* Mittelwert / Average Value

Menüpunkt Point of Menu P+ / P–	Einstellung Adjustment ◀ / ▶	Hinweis Hint	SEDANCE 70 ST 70-2405/5 TOP	GREENVILLE 7008/5
IFOF	siehe Abgleich / see Adjustment	Offset ZF-Demodulator / Offset IF demodulator	32*	32*
HPAR	siehe Abgleich / see Adjustment	Schräglage vertikal / Horizontal parallelogram	32*	32*
HBOW	siehe Abgleich / see Adjustment	Horizontale Biegung / Horizontal bow	32*	32*
HOTEL	ON			
	OFF		X	X
SUBWOOFER	YES			
	NO		X	X
CRT	4:3		X	X
	16:9			
TEST	siehe Abgleich / see Adjustment		9*	9*
AAV	YES	automatische AV-Umschaltung automatic AV switching	X	X
	NO			
PAL	YES	nur PAL / PAL only	X	X
	NO	andere Versionen / other versions		
EWP1	siehe Abgleich / see Adjustment	16:9 Ost/West Parabel (für 4:3 Geräte) 16:9 East west parabola width (for 4:3 sets)	8*	8*
DBAS	YES	Dynamik-Bass / Dynamic bas	X	X
	NO			
DEMO	YES	ATS Reset	X	X
	NO			
BLUE	YES	Blauer Hintergrund / Blue back	X	X
	NO			
EWW1	siehe Abgleich / see Adjustment	Bildbreite (nur für 16:9 Geräte) Horizontal width (only for 16:9 sets)	–	–
VZM1	siehe Abgleich / see Adjustment	Vertikal Zoom (nur für 16:9 Geräte) Vertical zoom (only for 16:9 sets)	–	–

* Mittelwert / Average Value

2. Programmsuchlauf (ATS)

Tasten " i " (Hauptmenü) –> P+ / P– "TUNING" –> "OK" –> P+ / P– "SUCHLAUF" –> "OK" –> P+ / P– / ◀ / ▶ Land auswählen und mit "OK" Suchlauf starten.
Das automatische Sendersuchsystem stoppt bei jedem empfangswürdigen Sender (AFC und Koinzidenz) und speichert automatisch die entsprechenden Senderdaten mit dem jeweiligen Standard. Danach wird der Suchlauf fortgesetzt.
Tastendruck " i " bricht den ATS-Lauf ab.

3. Software-Versionsnummer

Die Software-Versionsnummer wird nach Beenden des Service Modes angezeigt:

VER SB8973G_G**02**
CF13
T01031711

2. Autoprogram (ATS)

Buttons " i " (Main menu) –> P+ / P– "SETUP" –> "OK" –> P+ / P– "AUTOPROGRAM" –> "OK" –> P+ / P– / ◀ / ▶ select Country and start search with "OK".
The autoprogram system stops at every station of acceptable reception quality (AFC and coincidence) and stores the station data and the respective standard automatically. The system then continues searching.
Pressing the " i " button stops the ATS function.

3. Software Version Number

The software version number is shown after ending the service mode:

VER SB8973G_G**02**
CF13
T01031711

Abgleich

Messgeräte: 100MHz-Oszilloskop mit Tastkopf 10:1, Digitalvoltmeter, Farbbildgenerator.

Servicearbeiten nach Austausch bzw. Reparatur:
- **Netzteil:** Abgleich 1
- **Tuner / ZF:** Abgleich 2
- **IC101:** Abgleich 2
- **IC401 (EEPROM):** Abgleich 2, 3…5
- **Bildröhre:** Abgleich 3…5
- **Bildrohrplatte:** Abgleich 3, 5
- **Ablenkung:** Abgleich 4

1. Spannung U1
- Digitalvoltmeter: D611 Kathode (U1)
- Programm: AV
- Helligkeit: Minimum
- Kontrast: Minimum
- **Spannung U1** mit **P601** entsprechend der Bildröhre einstellen:

Bildröhre	U1	Bildröhre	U1
A66EAK071X11	**147V**	W66EHK51X36	**140V**
A66EAK075X11	**147V**	W66EJU023X015	**138V**
A66EHJ13X38	**147V**	W66EJU023X815	**138V**
A66EHJ13X62	**145V**	W66ELC011X001	**117V**
A66EHJ13X62	**145V**	W66ERF022X013	**142V**
A66EMZ43X07	**145V**	W66LYA696X02	**129V**
A66QEW13X46	**145V**	W66QBD240X11	**140V**
A66QEW13X49	**145V**	W66QDE993X286	**125V**
W66ECK001X13	**140V**	W66QDS757X54	**125V**
W66ECK011X13	**133V**		

2. AGC
- Oszilloskop am Tuner-Ausgang Pin 11 anschließen.
- Normsender 70dBµV ±1dBµV (ohne Tonträger / Bild) am Antenneneingang einspeisen.
- Service Mode aufrufen: Taste " i " drücken –> "8500" eingeben.
- **AGC** mit den Tasten P+ / P- anwählen.
  Mit den Tasten ◀ / ▶ folgenden Pegel entsprechend des Tuners und der Empfangsnorm einstellen:
  - Tuner Philips / Thomson:
    - PAL BGI, PAL SECAM BG/DK: 840 ±20mV$_{SS}$
    - PAL SECAM BG-LL': 600 ±20mV$_{SS}$
    - PAL BG Mono, PAL SECAM BG Mono: 750 ±20mV$_{SS}$
    - PAL I Mono: 900 ±20mV$_{SS}$
  - Tuner Sharp:
    - PAL SECAM BG-DK, PAL BG: 480 ±20mV$_{SS}$
    - PAL SECAM BG: 480 ±20mV$_{SS}$
  - Tuner Panasonic:
    - PAL SECAM BG, PAL BG: 480 ±20mV$_{SS}$
    - PAL I: 480 ±20mV$_{SS}$
    - PAL SECAM BG-DK: 530 ±20mV$_{SS}$
- **TEST** mit den Tasten P+ / P- anwählen.
  - Tuner Philips / Thomson:
    TEST mit den Tasten ◀ / ▶ einstellen: TEST = AGC – 5
  - Tuner Sharp oder Panasonic
    TEST mit den Tasten ◀ / ▶ auf gleichen Wert wie bei AGC einstellen.
- Service Mode beenden: Taste "TXT" drücken.

3. Screen
- Service Mode aufrufen: Taste " i " drücken –> "8500" eingeben.
- **SCRN** mit den Tasten P+ / P- anwählen und mit den Tasten ◀ / ▶ auf **ON** stellen. Auf dem Bildschirm wird "BRI 00" angezeigt.
- **SCREEN** am Dioden-Splitt-Trafo TR502 so einstellen, dass die Bildschrimfläche gerade dunkel (schwarz) ist.
- **SCRN** mit den Tasten ◀ / ▶ auf **OFF** stellen.
- Service Mode beenden: Taste "TXT" drücken.

Adjustment

Measuring instruments: 100MHz oscilloscop with 10:1 test probe, digital voltmeter, colour video generator.

Service works after replacement or repair of the following modules:
- **Power supply:** adjustment 1
- **Tuner / IF:** adjustment 2
- **IC101:** adjustment 2
- **IC401 (EEPROM):** adjustment 2, 3…5
- **CRT:** adjustment 3…5
- **CRT panel:** adjustment 3, 5
- **Deflection:** adjustment 4

1. Supply Voltage U1
- Digital voltmeter: D611 cathode (U1)
- Programme: AV
- Brightness: Minimum
- Contrast: Minimum
- Adjust **voltage U1** the values below the CRT with **P601**.

CRT	U1	CRT	U1
A66EAK071X11	**147V**	W66EHK51X36	**140V**
A66EAK075X11	**147V**	W66EJU023X015	**138V**
A66EHJ13X38	**147V**	W66EJU023X815	**138V**
A66EHJ13X62	**145V**	W66ELC011X001	**117V**
A66EHJ13X62	**145V**	W66ERF022X013	**142V**
A66EMZ43X07	**145V**	W66LYA696X02	**129V**
A66QEW13X46	**145V**	W66QBD240X11	**140V**
A66QEW13X49	**145V**	W66QDE993X286	**125V**
W66ECK001X13	**140V**	W66QDS757X54	**125V**
W66ECK011X13	**133V**		

2. AGC
- Connect the oscilloscope to tuner output pin 11.
- Apply an standard RF signal 70dBµV ±1dBµV (without sound carrier / picture) in aerial input.
- Start the Service Mode: press button " i " –> enter "8500".
- Call up **AGC** with buttons P+ / P-.
  Set the level with the buttons ◀ / ▶ according to tuner and TV standard:
  - Tuner Philips / Thomson:
    - PAL BGI, PAL SECAM BG/DK: 840 ±20mV$_{PP}$
    - PAL SECAM BG-LL': 600 ±20mV$_{PP}$
    - PAL BG Mono, PAL SECAM BG Mono: 750 ±20mV$_{PP}$
    - PAL I Mono: 900 ±20mV$_{PP}$
  - Tuner Sharp:
    - PAL SECAM BG-DK, PAL BG: 480 ±20mV$_{PP}$
    - PAL SECAM BG: 480 ±20mV$_{PP}$
  - Tuner Panasonic:
    - PAL SECAM BG, PAL BG: 480 ±20mV$_{PP}$
    - PAL I: 480 ±20mV$_{PP}$
    - PAL SECAM BG-DK: 530 ±20mV$_{PP}$
- Call up **TEST** with buttons P+ / P-.
  - Tuner Philips / Thomson:
    Set **TEST** with buttons ◀ / ▶ : TEST = AGC – 5
  - Tuner Sharp or Panasonic
    Set **TEST** with buttons ◀ / ▶ to the same value of AGC.
- End the Service Mode: Press button "TXT".

3. Screen
- Start the Service Mode: press button " i " –> enter "8500".
- Call up **SCRN** with buttons P+ / P- and switch **ON** with buttons ◀ / ▶.
  "BRI 00" is shown on screen.
- Adjust **SCEEN** control at the FPT TR502, that screen is dark (black).
- Switch **OFF** the **SCRN** with the buttons ◀ / ▶.
- End the Service Mode: Press button "TXT".

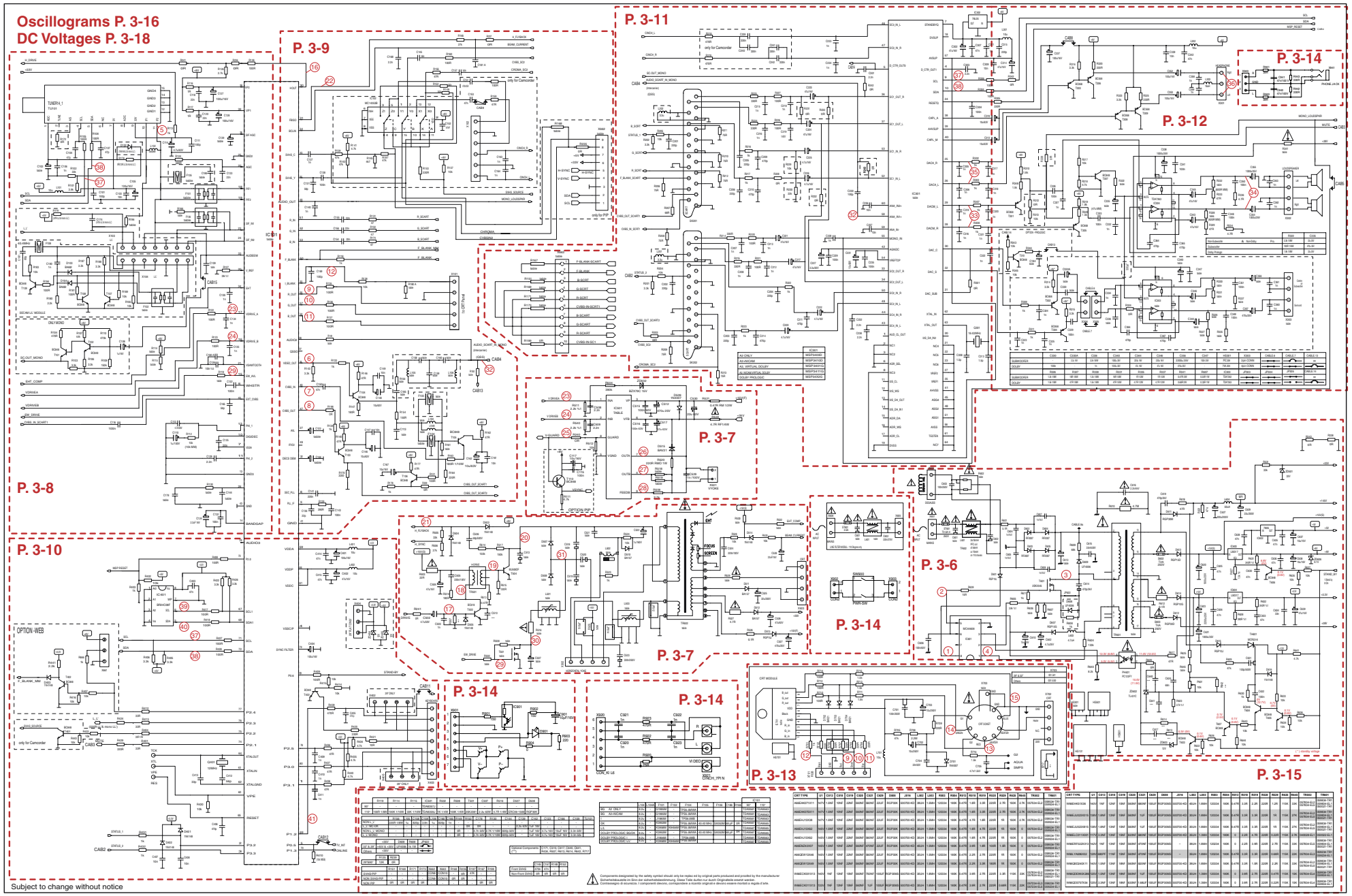
4. Geometrie
– Geometrie-Testbild einspeisen.
– Service Mode aufrufen: Taste " i " drücken –> "8500" eingeben.
– Mit den Tasten P+ / P- die gewünsche Bildgeometrie-Abgleich-funktion aufrufen und mit den Tasten ◄/► die Geometrie einstellen:
  – Bildmitte vertikal **VSLP**. Die untere Bildhälfte ist ausgeblendet. Den Bildinhalt so einstellen, dass die Mittelline gerade nicht mehr sichtbar ist.
  – Zoom vertikal **VZOM**.
  Bei 16:9 Geräten den Wert auf 25 einstellen.
  Bei 4:3 Geräten VZOM so einstellen, dass der Kreis gerade den Rand berührt. Gegebenenfalls VSLP nochmals korrigieren.
  – Bildposition vertikal **VSHT**.
  – Bildlinearität vertikal **SCOR**.
  – Bildhöhe vertikal **VAMP**.
  – Bildbreite bei 4:3 Geräten **EWW**.
  – Bildbreite bei 16:9 Geräten **EWW1**.
  Anschließend **EWW** einstellen: **EWW** = EWW1 – **21**
  – Zoom vertikal bei 16:9 Geräten **VZM1**. Bildhöhe so einstellen, dass die 2 Line von oben und von unten am Bildrand ist.
  – Bildposition horizontal **HSHT**.
  – Ost/West-Parabel 4:3 **EWPW**.
  – Ost/West-Trapez **EWT**.
  – Ost/West-Parabel 16:9 **EWP1**.
  – Ecken oben **EWCU**.
  – Ecken unten **EWCL**.
  – Schräglage vertikal (Parallelogramm) **HPAR**.
  – Biegung vertikal **HBOW**.
– Service Mode beenden: Taste "TXT" drücken.

5. Weißabgleich / Cut off
– Testbild Grautreppe einspeisen.
– Service Mode aufrufen: Taste " i " drücken –> "8500" eingeben.
– **GRN** mit den Tasten P+ / P- anwählen und mit den Tasten ◄/► auf **32** stellen.
– **RED** und **BLUE** jeweils mit den Tasten P+ / P- anwählen und mit den Tasten ◄/► so einstellen, dass der weiße Bildbereich **unbunt** ist. Sollte sich der Weißwert nicht einstellen lassen, Wert für **GRN** korrigieren.
– **BLOR** und **BLOG** jeweils mit den Tasten P+ / P- anwählen und mit den Tasten ◄/► so einstellen, dass der dunkle Bildbereich **unbunt** ist.
– Service Mode beenden: Taste "TXT" drücken.

4. Geometry
– Apply a geometry test pattern.
– Start the Service Mode: press button " i " –> enter "8500".
– Call up the geometry function with buttons P+ / P- and adjust the geometry with buttons ◄/►:
  – Vertical slope **VSLP**. The lower half part of the pattern is blanked. Adjust picture so that the middle line of the pattern is cut.
  – Zoom vertical **VZOM**.
  For 16:9 sets, adjust the value to 25.
  For 4:3 sets, adjust the circle of pattern just touches to the upper an lower edges. Readjust the VSLP if required.
  – Vertical shift **VSHT**.
  – Vertical linearity **SCOR**.
  – Vertical amplitude **VAMP**.
  – Horizontal width for 4:3 sets **EWW**.
  – Horizontal width for 16:9 sets **EWW1**.
  Adjust **EWW** afterward: **EWW** = EWW1 – **21**
  – Vertical zoom for 16:9 sets **VZM1**. Adjust the vertical amplitude so, that second lines from top and lower just touches to the edges.
  – Horizontal shift **HSHT**.
  – East west parabola width 4:3 **EWPW**.
  – East west trapezium **EWT**.
  – East west parabola width 16:9 **EWP1**.
  – Upper corner parabola **EWCU**.
  – Lower corner parabola **EWCL**.
  – Vertical parallelogramm with **HPAR**.
  – Vertical bow **HBOW**.
– End the Service Mode: Press button "TXT".

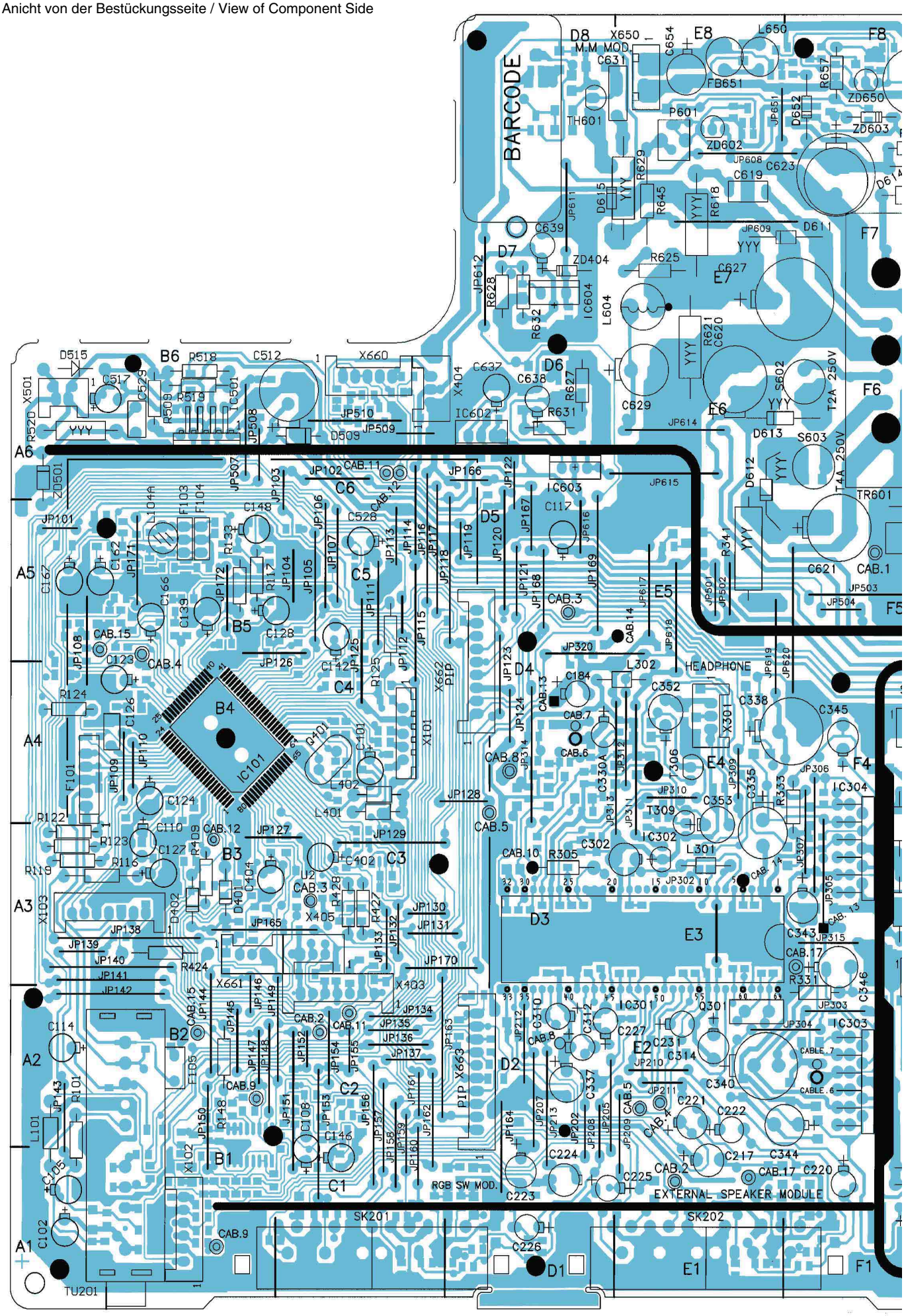
5. White Balance / Cut off
– Apply a Grey Scale Test pattern.
– Start the Service Mode: press button " i " –> enter "8500".
– Call up **GRN** with buttons P+ / P- and set it to 32 with buttons ◄/►.
– Call up **RED** and **BLUE** with buttons P+ / P- and adjust the values so that the white part of the picture becomes achromatic. If white balance can not be adjusted properly change GRN value.
– Call up **BLOR** and **BLOG** with the buttons P+ / P- and adjust the values so that the dark part of the picture becomes achromatic.
– End the Service Mode: Press button "TXT".

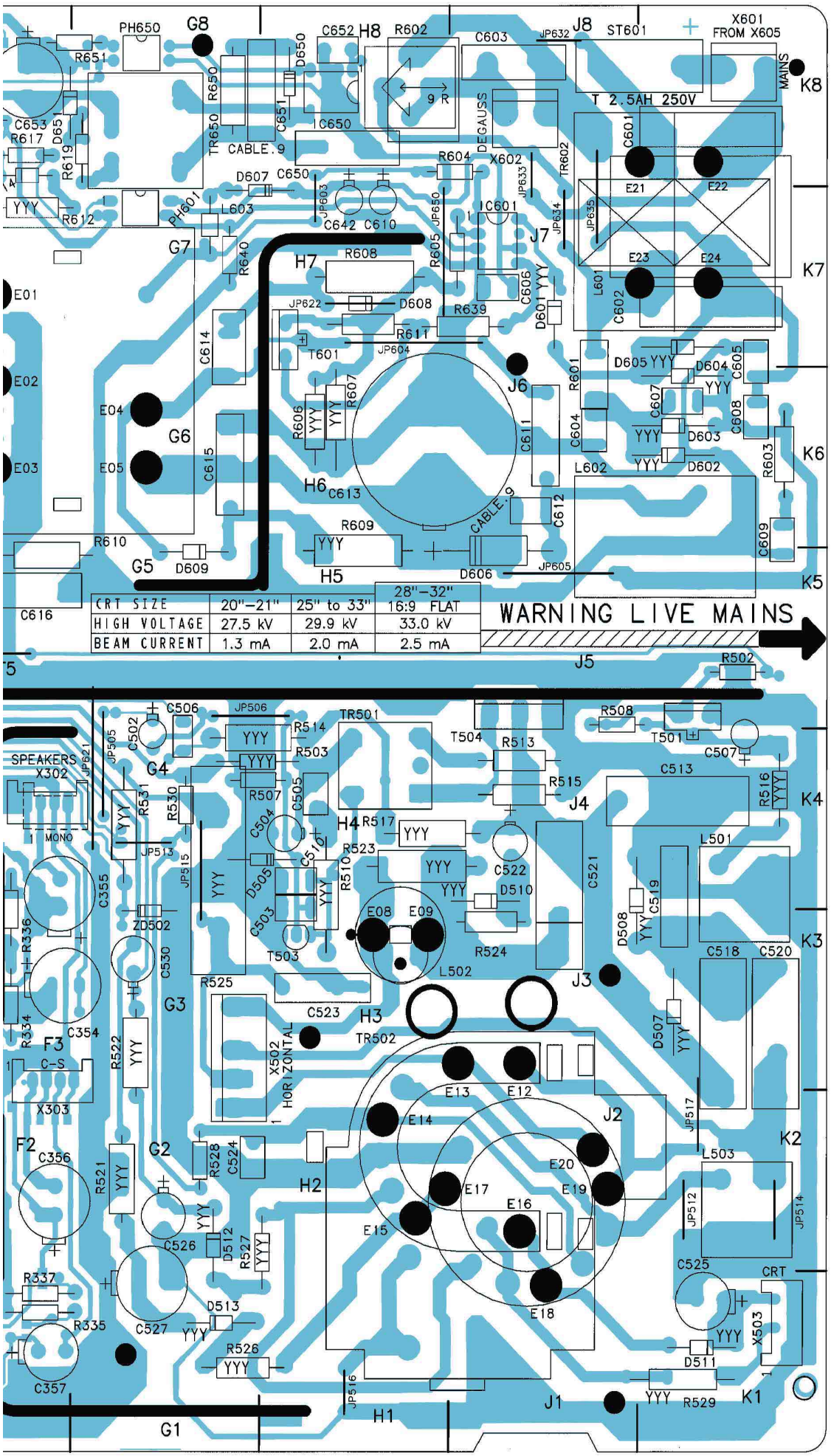
Übersicht / Overview



Chassis

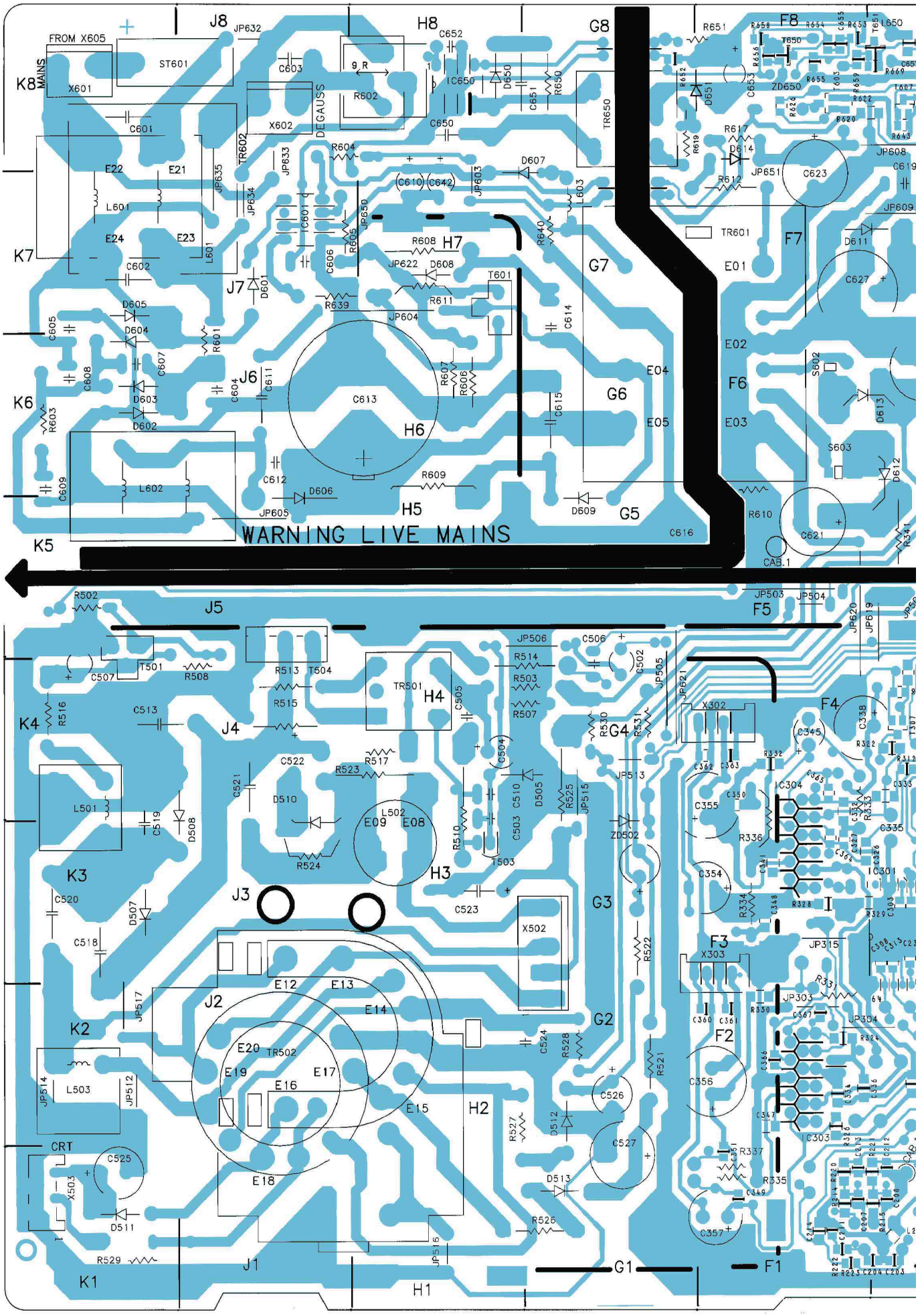
Anicht von der Bestückungsseite / View of Component Side

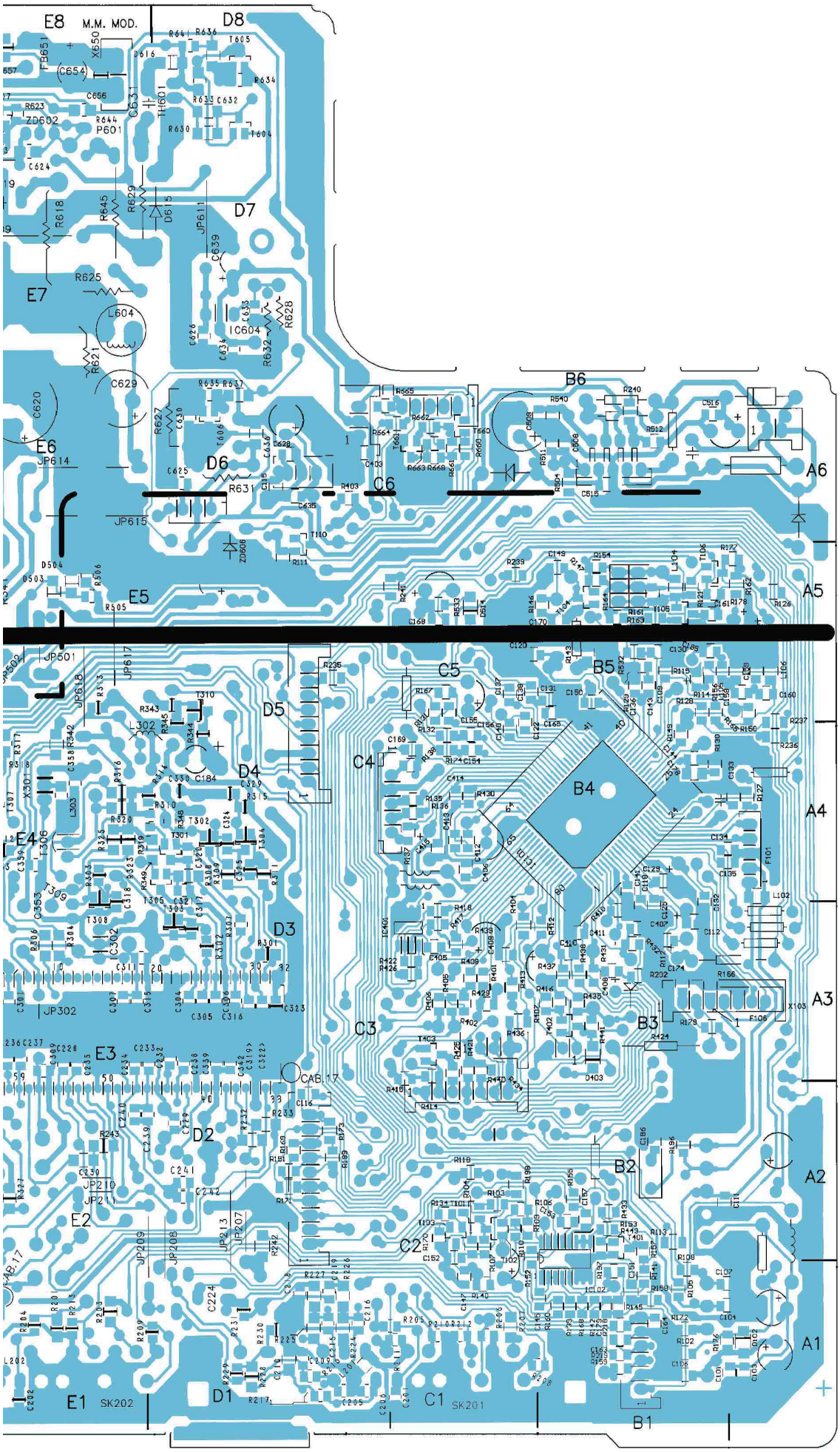



PH650
G8
C652
H8
R602
C603
JP632
J8
ST601
X601
FROM X605
MAINS
K8
T 2.5AH 250V
R651
C650
DEGAUSS
9 R
C653
R617
D651
R619
TR650
CABLE.9
D607
C650
R604
X602
TR602
C601
E21
E22
JP633
JP635
JP634
JP603
JP650
C642 C610
L603
PH601
R612
YYY
G7
H7
R608
J7
E23
E24
K7
R640
R605
C606
D601 YYY
L601
C602
E01
JP622
D608
R639
R611
T601
JP604
D605 YYY
D604
C605
E02
J6
R601
C607
C608
E04
G6
R606
R607
C611
C604
D603
K6
E03
E05
C615
H6
C613
L602
D602
R603
CABLE.9
C612
R609
C609
R610
G5
D609
H5
D606
JP605
K5
C616
CRT SIZE | 20"–21" | 25" to 33" | 28"–32" 16:9 FLAT
HIGH VOLTAGE | 27.5 kV | 29.9 kV | 33.0 kV
BEAM CURRENT | 1.3 mA | 2.0 mA | 2.5 mA
WARNING LIVE MAINS
J5
R502
C506
JP506
TR501
T504
R513
R508
T501
C507
SPEAKERS
X302
JP621
JP505
C502
R514
R503
G4
C513
R516
K4
R507
C505
J4
R515
R531
R530
H4
R517
C504
C501
L501
JP513
MONO
R523
C522
C521
JP515
R510
D510
D505
C503
C519
D508
ZD502
C355
R336
E08
E09
R524
K3
C530
T503
C518
C520
R525
L502
J3
G3
C523
H3
TR502
D507
C354
R334
F3
C-S
X303
R522
X502
HORIZONTAL
E13
E12
E14
J2
JP517
F2
C356
G2
R528
C524
K2
L503
R521
E20
E19
E17
E16
H2
JP512
JP514
E15
C526
D512
R527
C525
CRT
R337
E18
D513
C527
R335
X503
D511
R526
C357
JP516
H1
J1
R529
K1
G1

Chassis

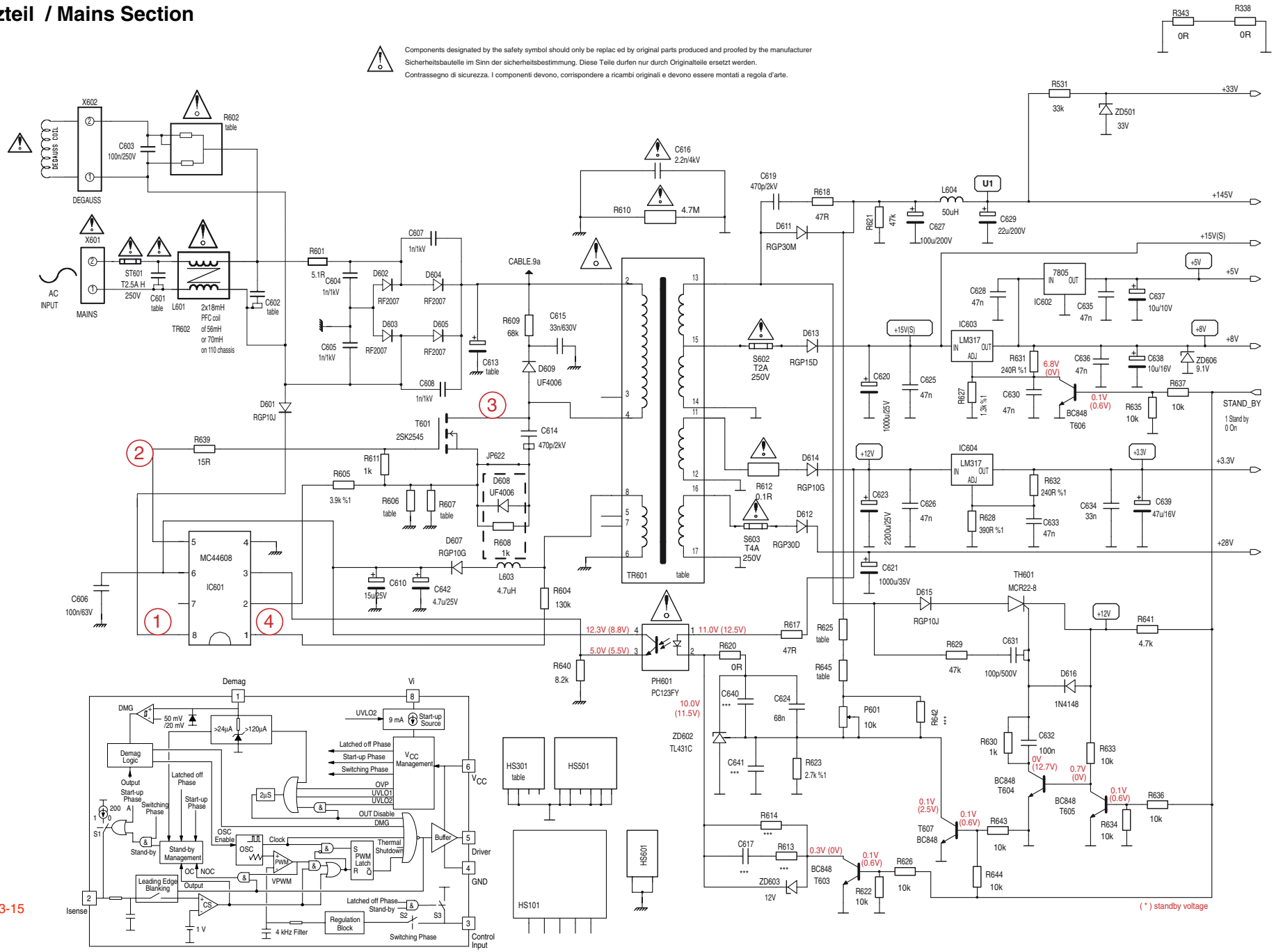
Anicht von der Lötseite / View of Solder Side




E8
M.M. MOD.
D8
D7
E7
L604
IC604
B6
A6
E6
JP614
D6
C6
JP615
A5
E5
JP501
JP617
JP618
D5
C5
B5
D4
C4
B4
A4
E4
D3
JP302
C3
B3
A3
E3
CAB.17
D2
B2
A2
E2
JP210
JP211
JP209
JP208
JP213
JP207
C2
E1
SK202
D1
C1
SK201
B1
A1

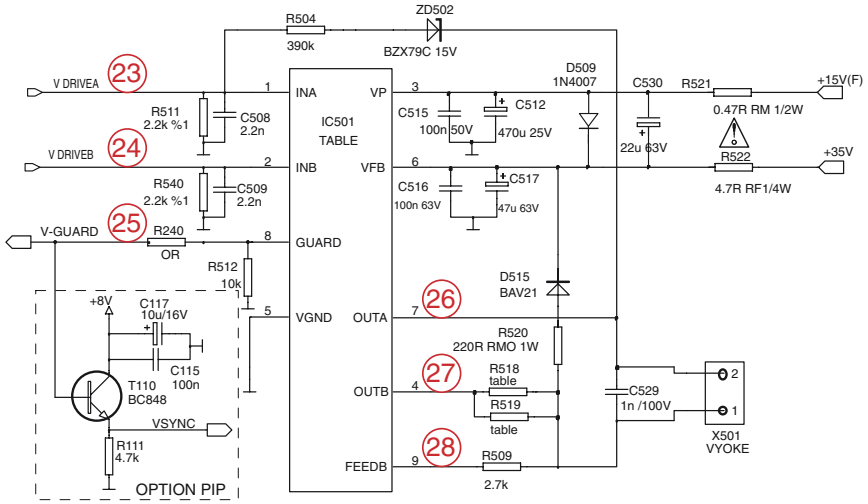
Chassis – Netzteil / Mains Section

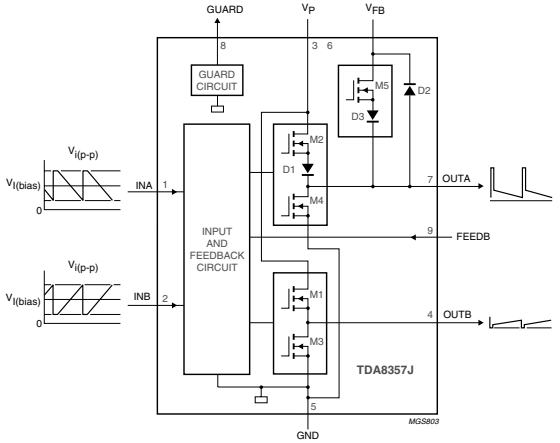
Components designated by the safety symbol should only be replac ed by original parts produced and proofed by the manufacturer
Sicherheitsbautelle im Sinn der sicherheitsbestimmung. Diese Teile durfen nur durch Originalteile ersetzt werden.
Contrassegno di sicurezza. I componenti devono, corrispondere a ricambi originali e devono essere montati a regola d'arte.



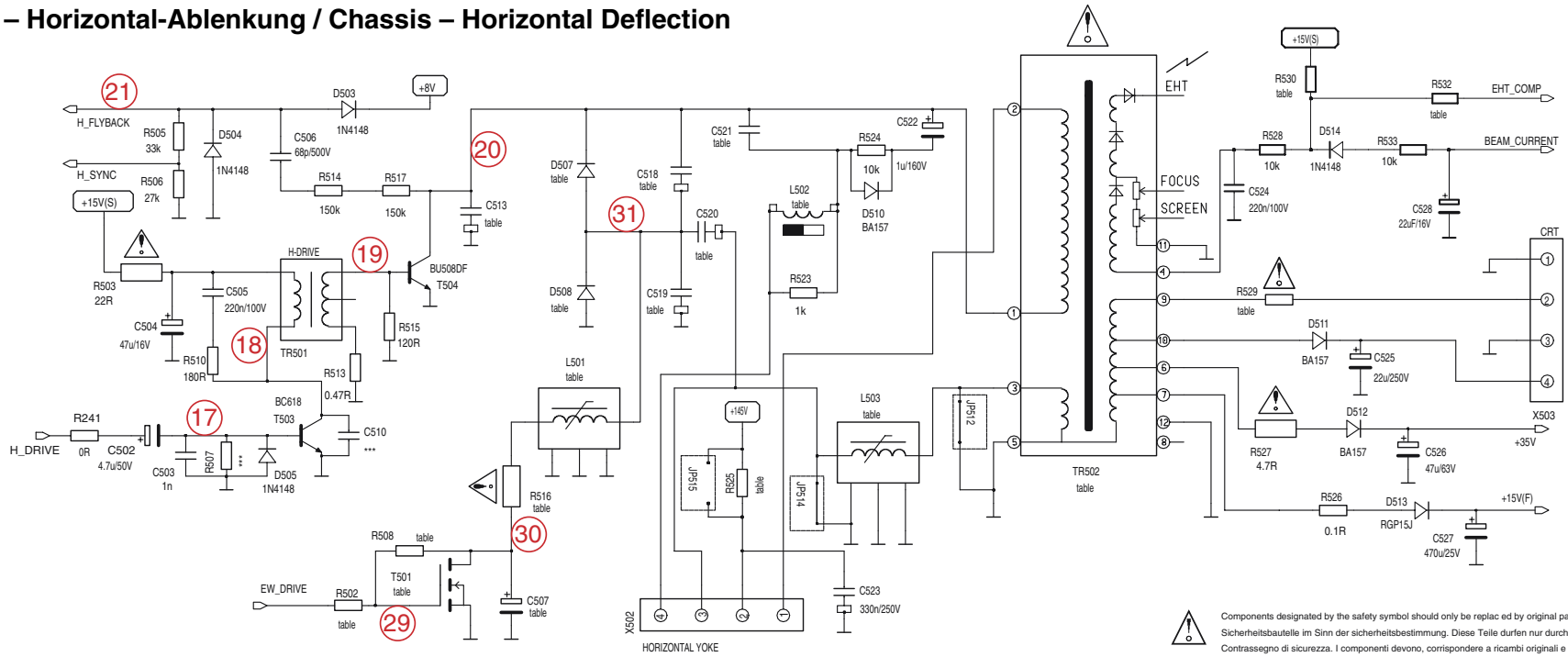
Chassis – Vertikal-Ablenkung / Chassis – Vertical Deflection

Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18





Chassis – Horizontal-Ablenkung / Chassis – Horizontal Deflection



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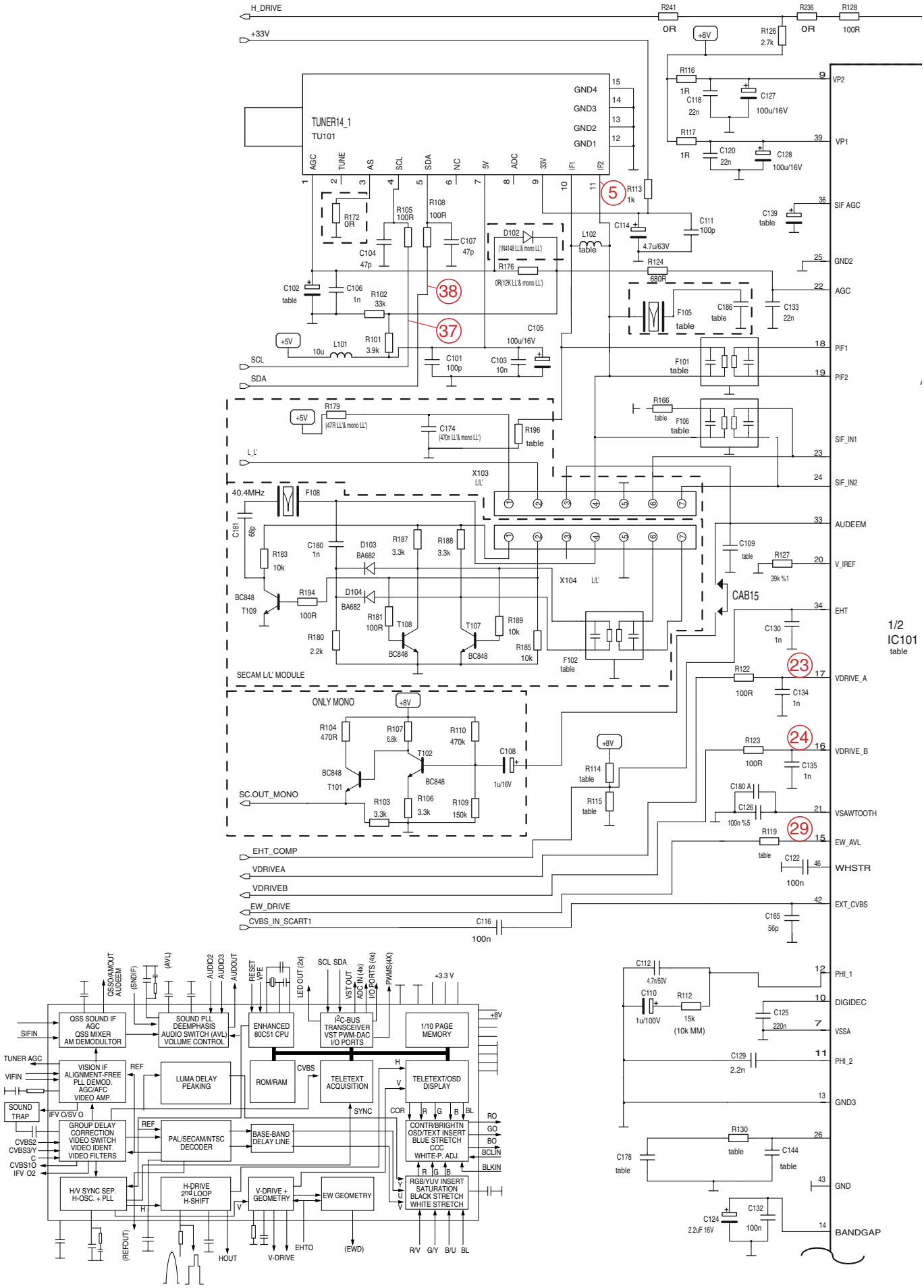
Contrassegno di sicurezza. I componenti devono, corrispondere a ricambi originali e devono essere montati a regola d'arte.

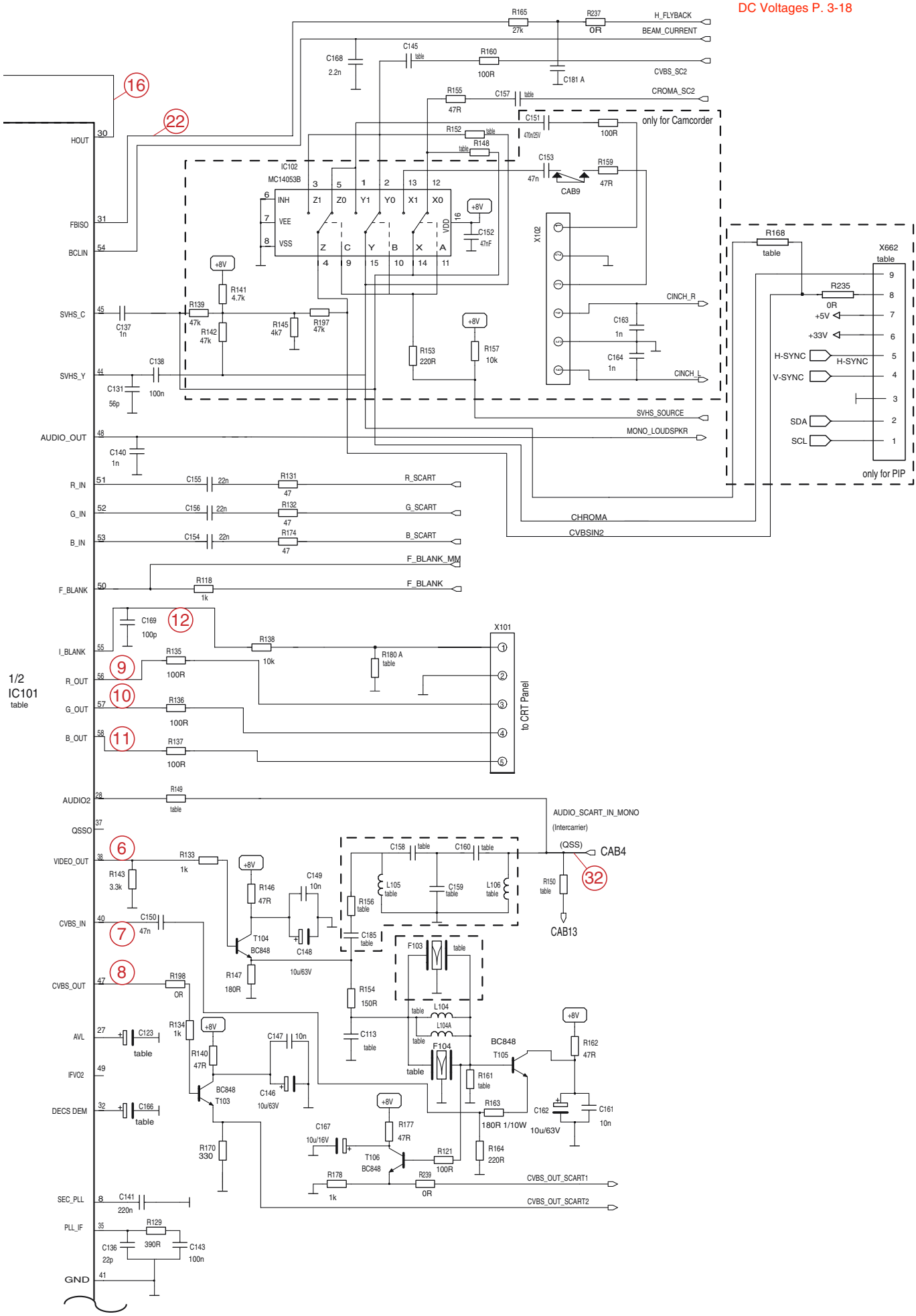
Chassis – IC101 Teil 1 / Part 1

Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18



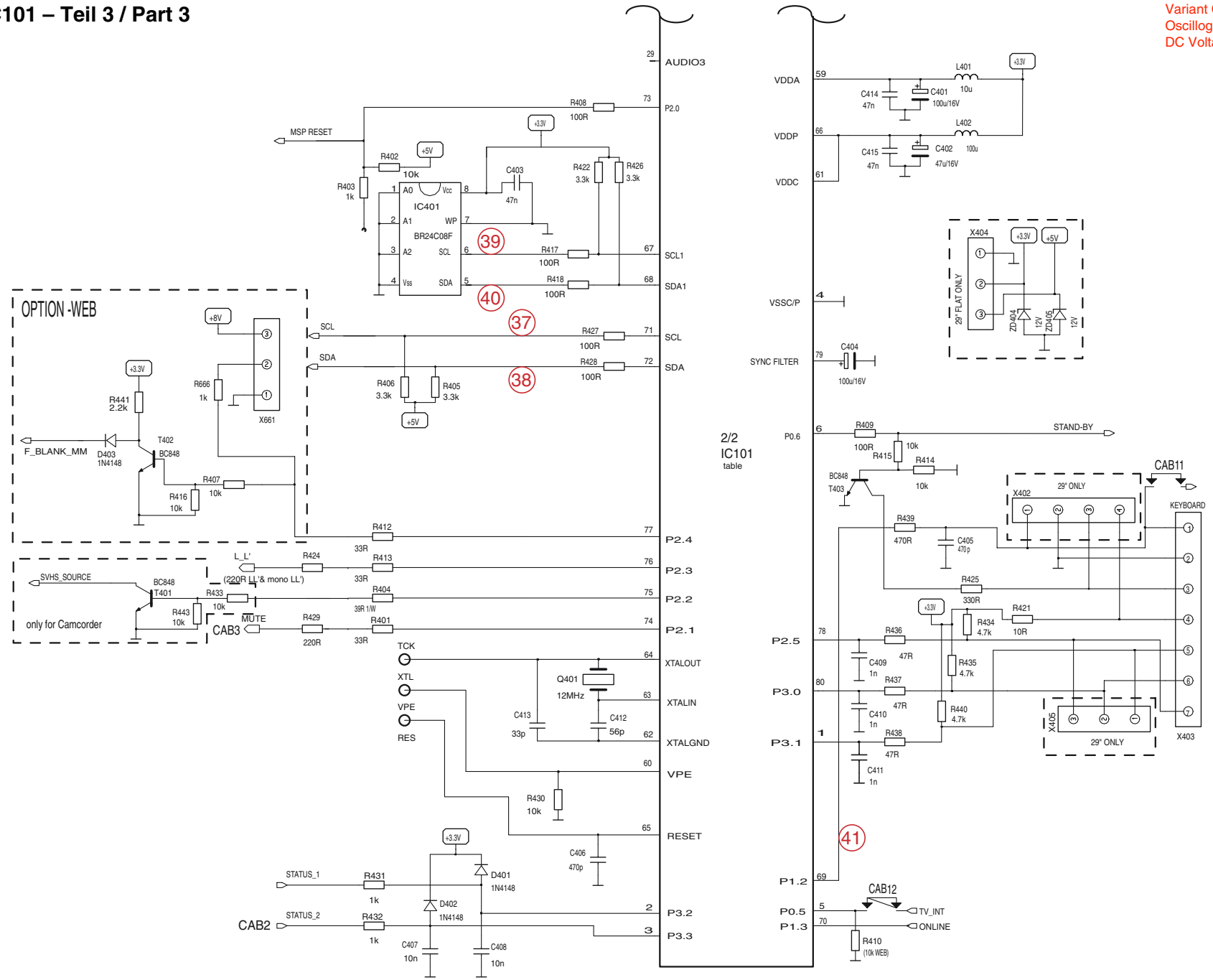
Chassis – IC101 Teil 2 / Part 2

Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18



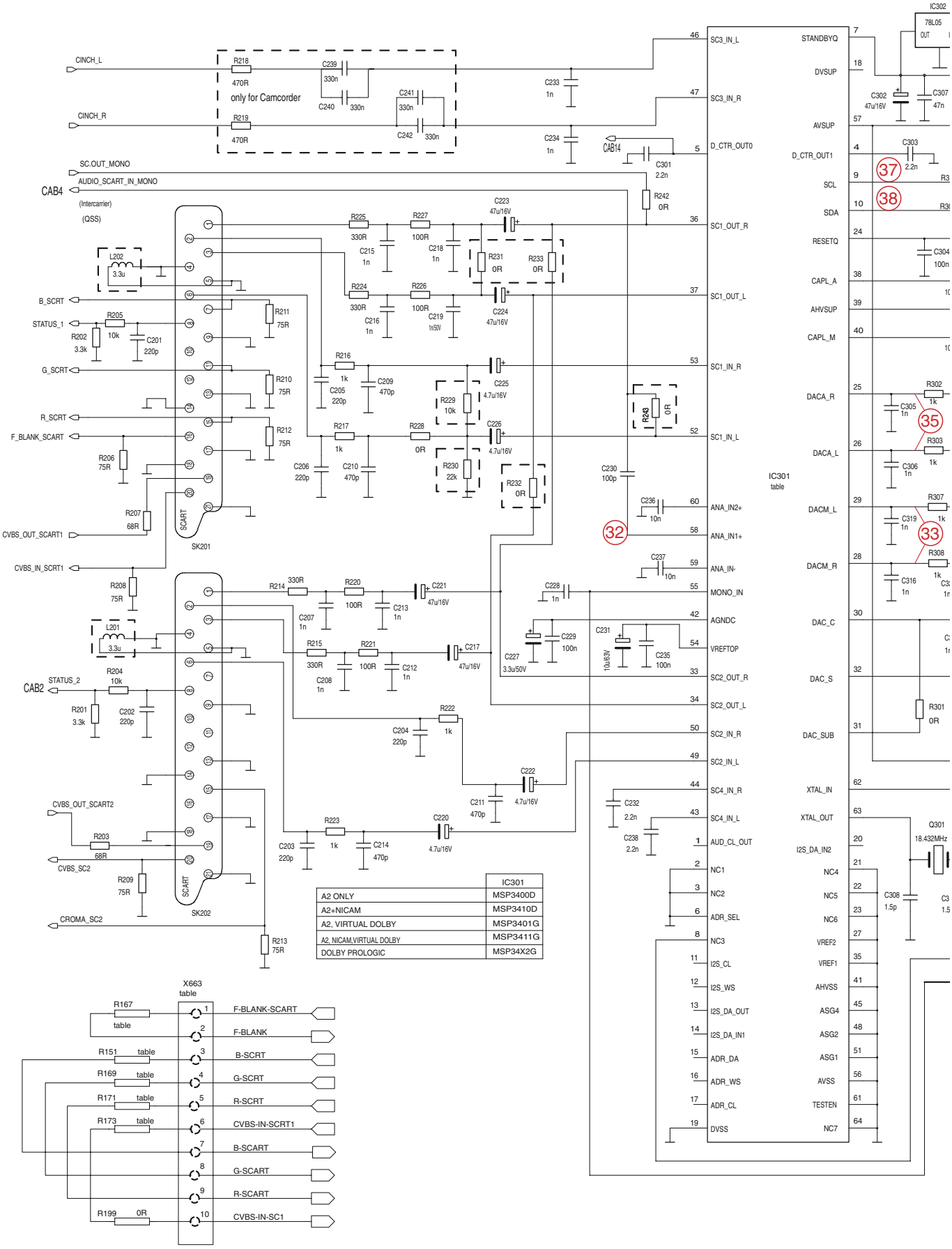
Chassis IC101 – Teil 3 / Part 3

Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18



Chassis – IC301 Teil 1 / Part 1

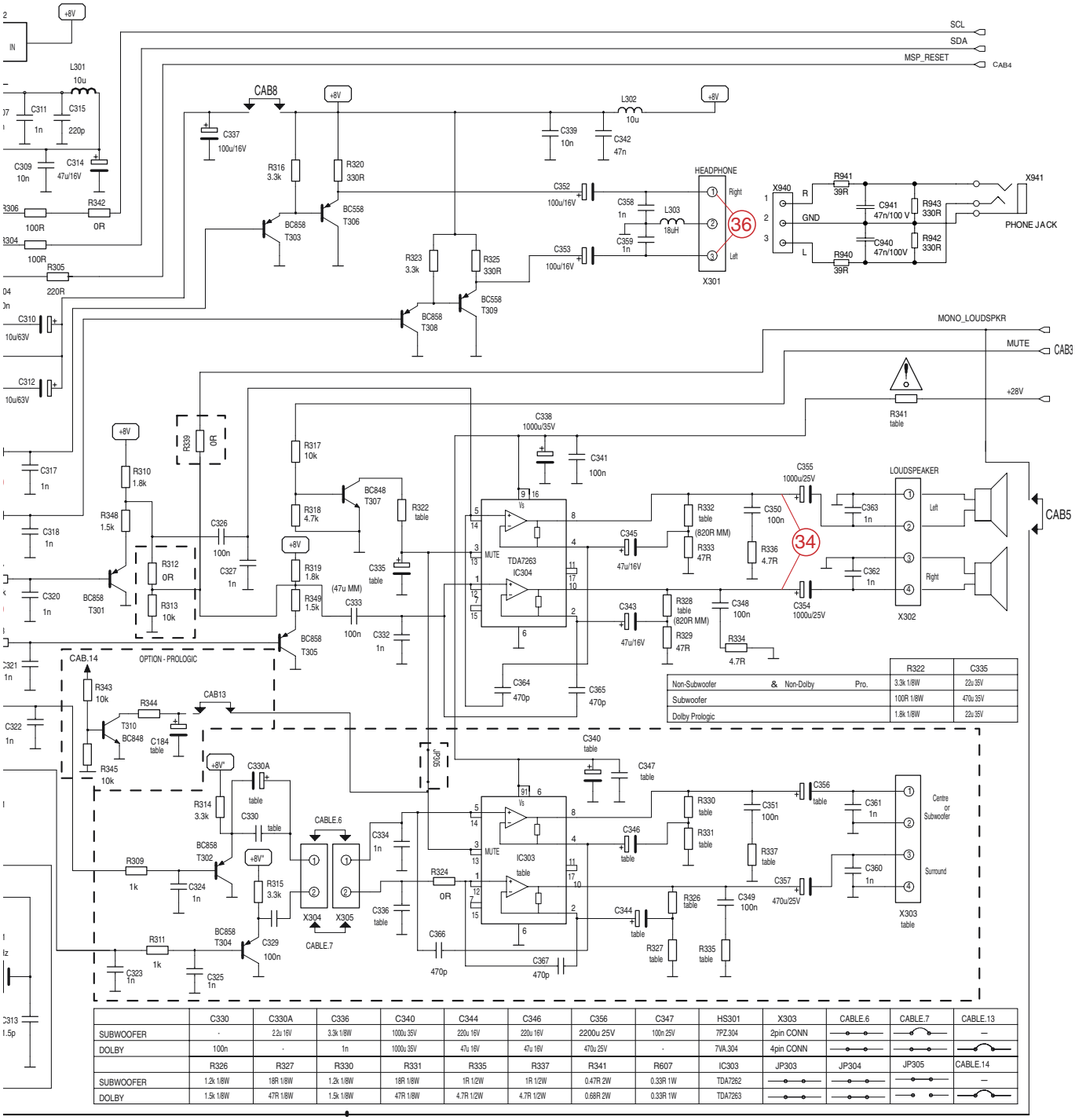
Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18



IC301
A2 ONLY	MSP3400D
A2+NICAM	MSP3410D
A2, VIRTUAL DOLBY	MSP3401G
A2, NICAM,VIRTUAL DOLBY	MSP3411G
DOLBY PROLOGIC	MSP34X2G

Chassis – IC301 Teil 2 / Part 2

Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18

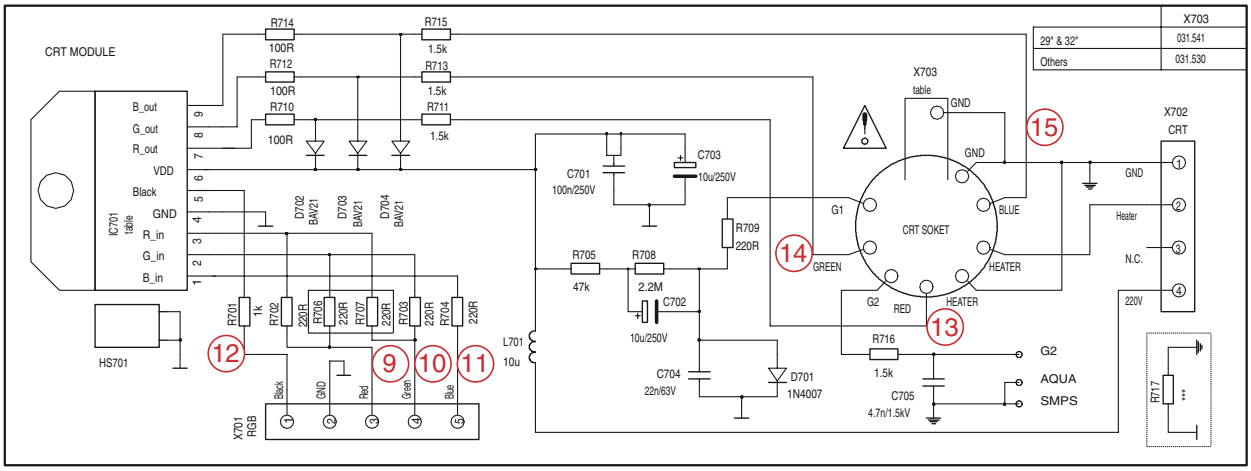


	R322	C335
Non-Subwoofer & Non-Dolby Pro.	3.3k 1/8W	22u 35V
Subwoofer	100R 1/8W	470u 35V
Dolby Prologic	1.8k 1/8W	22u 35V

	C330	C330A	C336	C340	C344	C346	C356	C347	HS301	X303	CABLE.6	CABLE.7	CABLE.13
SUBWOOFER	-	2.2u 16V	3.3k 1/8W	1000u 35V	220u 16V	220u 16V	2200u 25V	100n 25V	7PZ.304	2pin CONN			–
DOLBY	100n	-	1n	1000u 35V	47u 16V	47u 16V	470u 25V	-	7VA.304	4pin CONN			
	R326	R327	R330	R331	R335	R337	R341	R607	IC303	JP303	JP304	JP305	CABLE.14
SUBWOOFER	1.2k 1/8W	18R 1/8W	1.2k 1/8W	18R 1/8W	1R 1/2W	1R 1/2W	0.47R 2W	0.33R 1W	TDA7262				–
DOLBY	1.5k 1/8W	47R 1/8W	1.5k 1/8W	47R 1/8W	4.7R 1/2W	4.7R 1/2W	0.68R 2W	0.33R 1W	TDA7263				

Bildrohrplatte / CRT Panel

Variant Components P. 3-15
Oscillograms P. 3-16
DC Voltages P. 3-18



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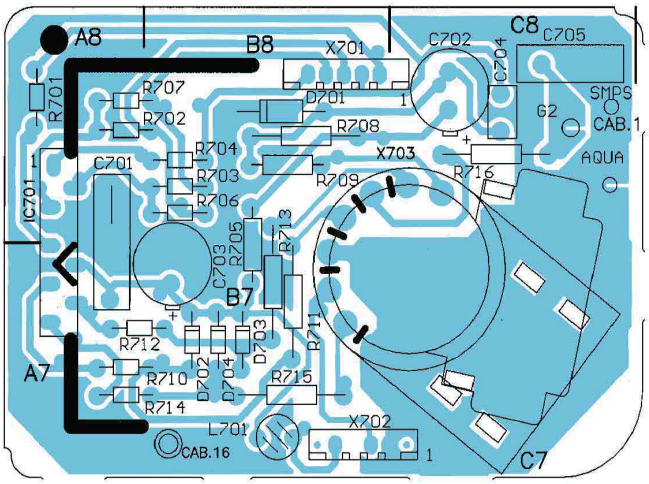
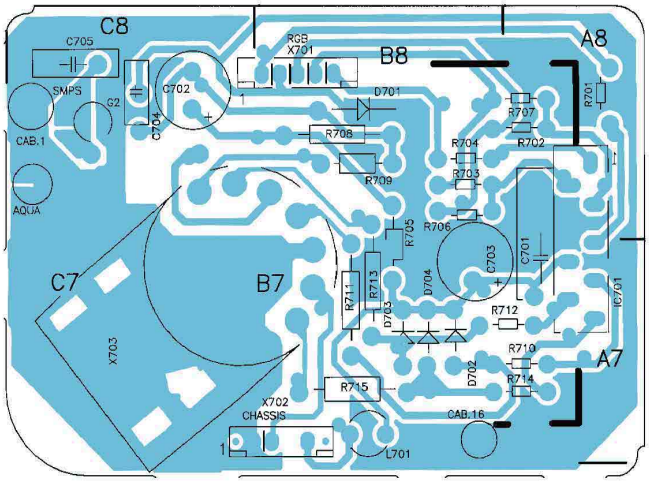
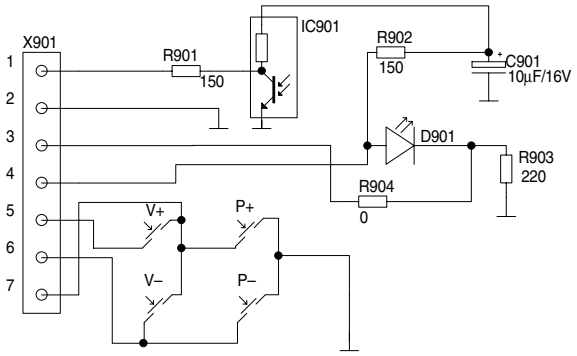
Anicht von der Bestückungsseite / View of Component Side

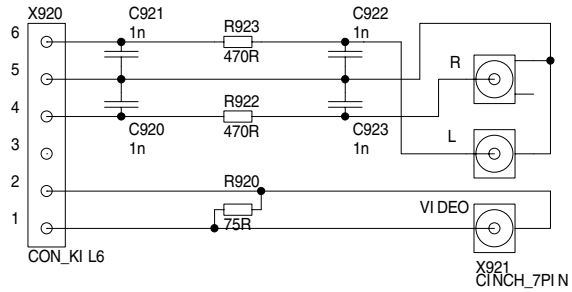


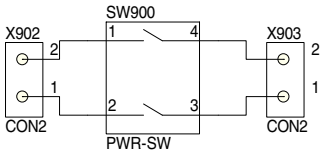
Anicht von der Lötseite / View of Solder Side

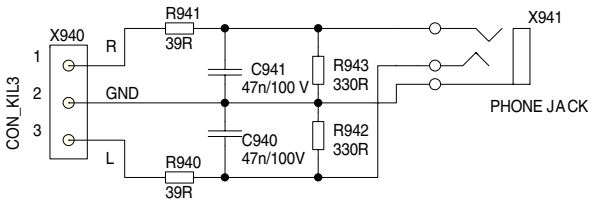


Bedieneinheit / Keyboard Control Unit

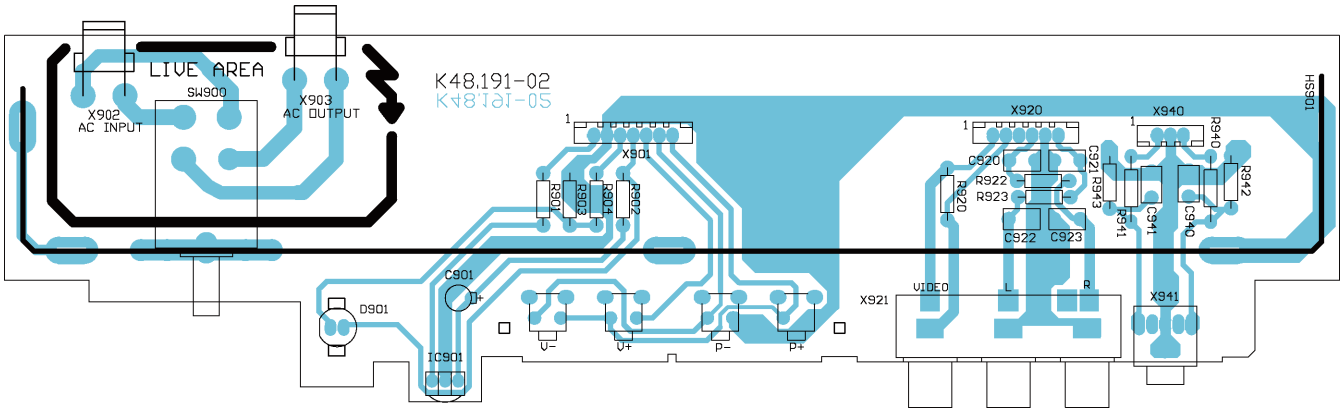




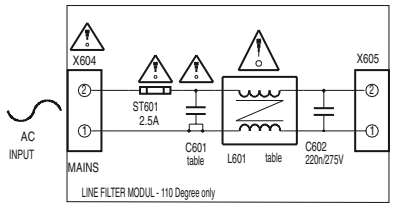




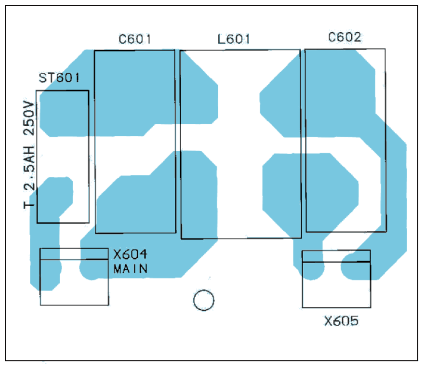
Anicht von der Bestückungsseite / View of Component Side



Netzfilter / Power Filter



Anicht von der Bestückungsseite / View of Component Side



Variantenbestückung / Variant Components

CRT TYPE	U1	C513	C518	C519	C520	C521	C629	D508	J516	L502	L503	R503	R504	R513	R518	R519	R520	R529	R625	R645	TR502	TR601
A66EAK071X11	147V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	39UH	1.5MH	120334	180K	0.47R	1.8R	3.3R	220R	2.7R	150K	2.7K	057534-EL2	059534-TR1 059534-EL1
A66EAK075X11	147V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	39UH	1.5MH	120334	180K	0.47R	1.8R	3.3R	220R	2.7R	150K	2.7K	057534-EL2	059534-TR1 059534-EL1
A66EHJ13X38	147V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	30UH	1.5MH	120334	180K	0.47R	4.7R	1.8R	220R	1R	150K	2.7K	057534-EL2	059534-TR1 059534-EL1
A66EHJ13X62	145V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	30UH	1.5MH	120334	180K	0.47R	1.8R	4.7R	220R	1R	150K	0	057534-EL2	059534-TR1 059534-EL1
A66EHJ13X62	145V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	30UH	1.5MH	120334	180K	0.47R	1.8R	4.7R	220R	1R	150K	0	057534-EL2	059534-TR1 059534-EL1
A66EMZ43X07	145V	1.5NF	10NF	22NF	560NF	470NF	22UF	RGP30K	500700-KD	45UH	1.5MH	120334	180K	0.47R	3.9R	1.8R	100R	1.5R	150K	0	057534-EL2	059534-TR1 059534-EL1
A66QEW13X46	145V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	30UH	1.5MH	120334	180K	0.47R	2.2R	2.7R	220R	1R	150K	0	057534-EL2	059534-TR1 059534-EL1
A66QEW13X49	145V	1.5NF	10NF	22NF	560NF	560NF	22UF	RGP30K	500700-KD	30UH	1.5MH	120334	180K	0.47R	2.2R	3.3R	180R	1R	150K	0	057534-EL2	059534-TR1 059534-EL1
W66ECK001X13	140V	1NF	13NF	15NF	560NF	750NF	100UF	RGP30MS	500700-KD	30UH	1.8MH	120334	180K	0.47R	3.9R	2.7R	220R	3.3R	115K	33K	057834-EL2 057834-EL5	059834-TR1 059834-EL1 050021-TR1
W66ECK011X13	133V	1NF	13NF	15NF	560NF	1UF	100UF	RGP30MS	500700-KD	30UH	1.8MH	120334	180K	0.47R	3.9R	2.7R	220R	0.68R	115K	22K	057234-EL3 057234-EL5	059234-TR1 059234-EL1
W66EHK51X36	140V	1NF	12NF	15NF	560NF	680NF	100UF	RGP30MS	500700-KD	45UH	1.8MH	120334	180K	0.47R	3.3R	2.2R	220R	1.2R	115K	33K	057834-EL2 057834-EL5	059834-TR1 059834-EL1 050021-TR1
W66EJU023X015	138V	1.8NF	13NF	15NF	560NF	1UF	100UF	RGP30MS	500700-KD	30UH	1.8MH	120334	180K	0.47R	3.3R	3.3R	220R	1R	115K	27K	057834-EL2 057834-EL5	059834-TR1 059834-EL1 050021-TR1
W66EJU023X815	138V	1.8NF	13NF	15NF	560NF	1UF	100UF	RGP30MS	500700-KD	30UH	1.8MH	120334	180K	0.47R	3.3R	3.3R	220R	1R	115K	27K	057834-EL2 057834-EL5	059834-TR1 059834-EL1 050021-TR1
W66ELC011X001	117V	3.3NF	13NF	15NF	820NF	680NF	100UF	RGP30MS	500700-KD	35UH	1.3MH	120334	180K	0	2.2R	4.7R	220R	0.22R	115K	2.7K	040028-EL1	050022-EL1
W66ERF022X013	142V	1NF	13NF	15NF	560NF	470NF	100UF	RGP30MS	–	39UH	1.8MH	120234	180K	0	2.2R	3.9R	220R	2.7R	115K	33K	057834-EL5	059834-TR1 059834-EL1 050021-TR1
W66LYA696X02	129V	680PF	11NF	15NF	560NF	470NF	100UF	RGP30MS	–	35UH	1.8MH	120234	180K	0.47R	3.3R	3.3R	220R	0.68R	115K	22K	057934-EL3	059234-TR1 059234-EL1
W66QBD240X11	140V	1.5NF	13NF	18NF	560NF	820NF	100UF	RGP30MS	500700-KD	39UH	1.8MH	120334	180K	0.47R	3.3R	1.5R	220R	2.2R	115K	33K	057834-EL2 057834-EL5	059834-TR1 059834-EL1 050021-TR1
W66QDE993X286	125V	1.5NF	13NF	18NF	560NF	1UF	100UF	RGP30MS	500700-KD	30UH	1.3MH	120334	180K	0	3.9R	2.7R	220R	0.47R	115K	15K	057834-EL4	059934-TR1 059934-EL1
W66QDS757X54	125V	3.3NF	13NF	18NF	630NF	1.68UF	100UF	RGP30MS	500700-KD	30UH	1.3MH	120334	180K	0	3.9R	2.7R	220R	0.22R	115K	15K	057834-EL4	059934-TR1 059934-EL1

	R119	R114	R115	IC501	R502	R508	T501	C507	R516	D507	D508
90°	-	-	-	TDA8357J	-	-	-	-	-	-	-
110°	100R 1/8W	100K 1/10W	33K 1/10W	TDA8359J	1K 1/4W	100K 1/4W	25K2381	2.2u 63W	4.7R 1/4W	ERC06-1500	RGP30K

	R156	L105	C158	C159	L106	C160	C185	R149	R150	C178	R130	C144	C139	C142	C123	C166	C109	TU101
NON L_L'	220R 1/8W	1u	820p	3.9n	1u	820p	1n	-	-	-	-	-	-	-	-	-	-	
L_L' /BC-DK	-	-	-	-	-	-	-	-	0R	0R	-	-	2,2u 63V	1uF 16V	-	-	-	
NON L_L' MONO	-	-	-	-	-	-	-	0R	-	4.7n 50V	2.7K 1/10W	820p 50V	-	1uF 16V	4.7u 16V	10uF 16V	3.3n 50V	
L_L' MONO	-	-	-	-	-	-	-	0R	-	4.7n 50V	2.7K 1/10W	820p 50V	-	1uF 16V	4.7u 16V	10uF 16V	3.3n 50v	

	+35V	D608	R608	JP622
33° & 29°	+45V & +35V	UF4006	1k 1W	
Others	+35V	-	-	

	R125	R239
29°&90°	12K	0R

	R151	R169	R171	R173	X662	X663	R168	R235	R197	R167	R199
SVHS-PIP	-	-	-	-	CON9	CON10	-	0R	47K	-	-
NON SVHS-PIP	-	-	-	-	CON9	CON10	0R	0R	-	-	-
NON PIP	0R	0R	0R	0R	-	-	-	-	-	0R	0R

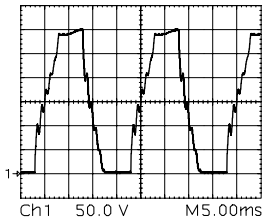
Optional Components (***)	C171, C510, C617, C640, C641, R434, R507, R613, R614, R642, R717

	C145	C157	R148	R152
Front SVHS	470n	47n	-	-
Non-Front SVHS	0R	0R	0R	0R

										IC101	
	L104	L104A	F101	F102	F104	F105	F106	C186	R166	90°	110°
BG A2 ONLY	8.2u	-	G1985M	-	TPS5.5MWA					TDA9561	TDA9563 / OM8363
BG A2+NICAM	8.2u	-	G1985M	-	TPS5.5MWA					TDA9561	TDA9563 / OM8363
I	8.2u	-	J1980M	-	TPS6.0MB					TDA9561	TDA9563 / OM8363
DK	8.2u	-	K3953M	-	TPS5.5MWA	40.40 MHz	G9353M	68 pF	0R	TDA9567	TDA9565 / OM8365
L/L	8.2u	-	K3958M	K9456M	TPS5.5MWA					TDA9567	TDA9565 / OM8365
DOLBY PROLOGIC BG/DK	8.2u	-	K3953M	-	TPS5.5MWA	40.40 MHz	G9353M	68 pF	0R	TDA9567	TDA9565 / OM8365
DOLBY PROLOGIC I	8.2u	-	J1956M	-	TPS6.0MB					TDA9561	TDA9563 / OM8363
DOLBY PROLOGIC L/L'	8.2u	-	K3958M	K9456M	TPS5.5MWA					TDA9567	TDA9565 / OM8365

Components designated by the safety symbol should only be replac ed by original parts produced and proofed by the manufacturer
Sicherheitsbautelle im Sinn der sicherheitsbestimmung. Diese Teile durfen nur durch Originalteile ersetzt werden.
Contrassegno di sicurezza. I componenti devono, corrispondere a ricambi originali e devono essere montati a regola d'arte.

Oszillogramme / Oscillograms



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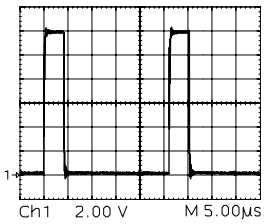

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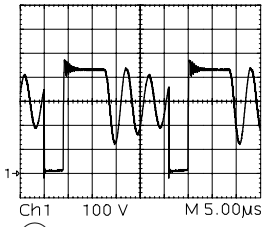

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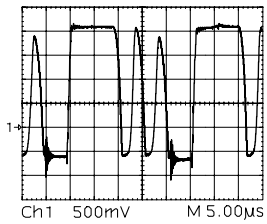

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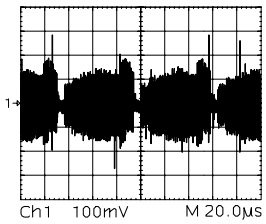

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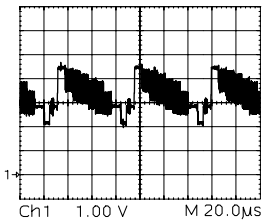

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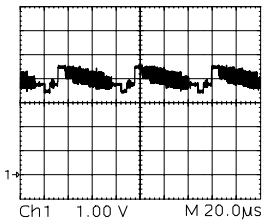

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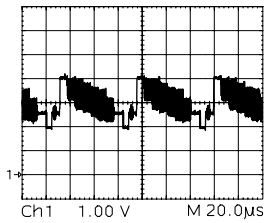

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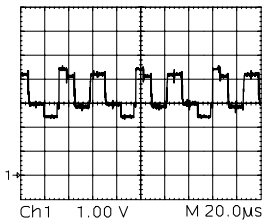

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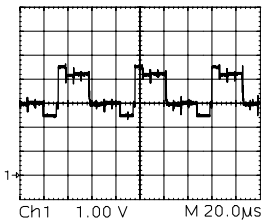

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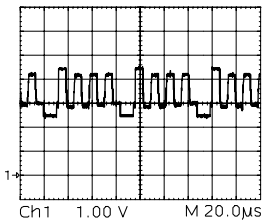

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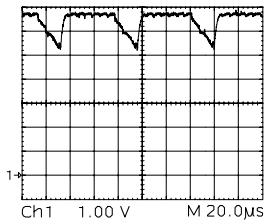

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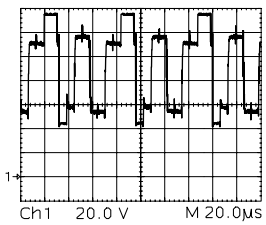

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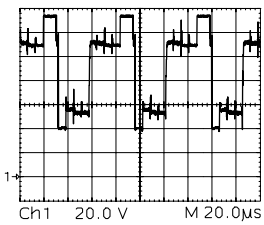

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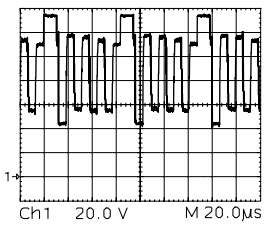

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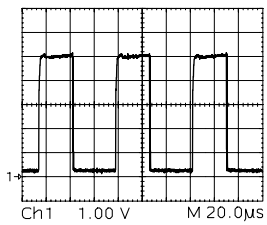

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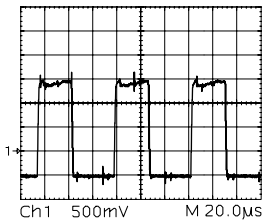

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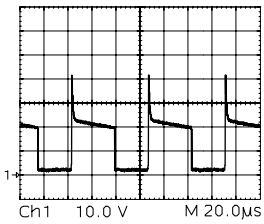

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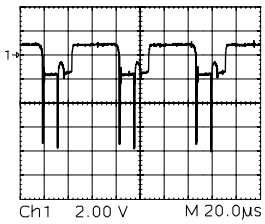

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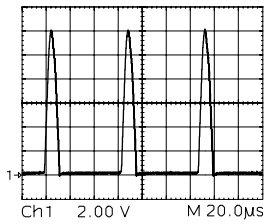

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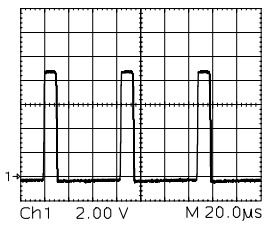

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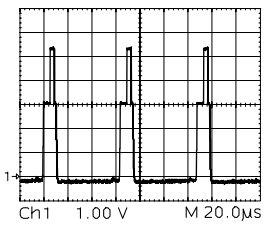

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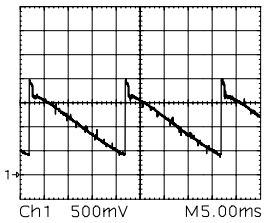

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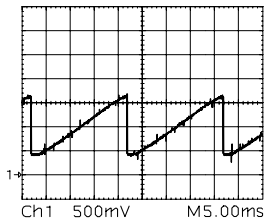

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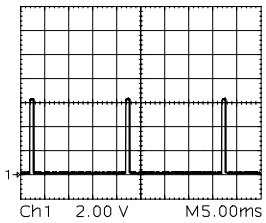

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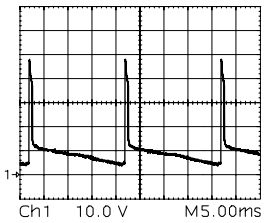

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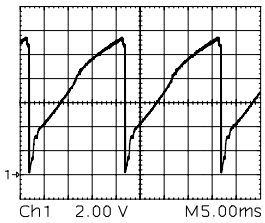

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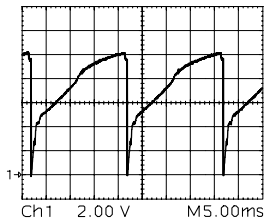
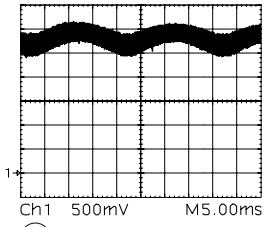
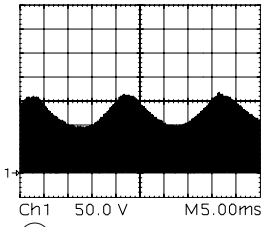


28



29



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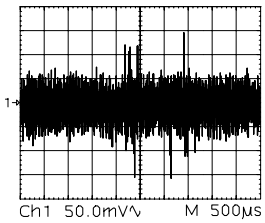
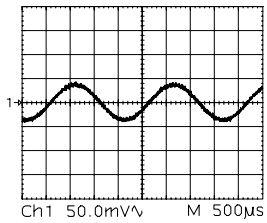


32



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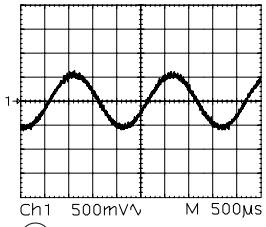

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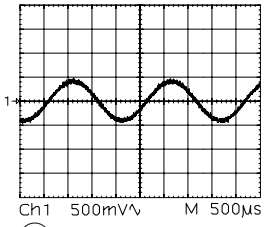

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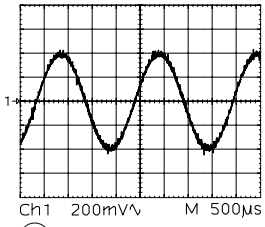
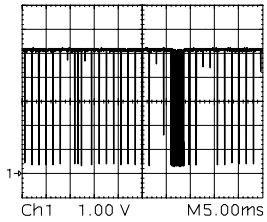


36



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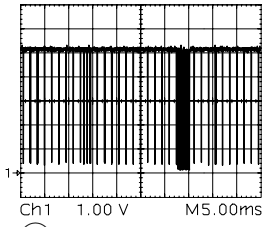
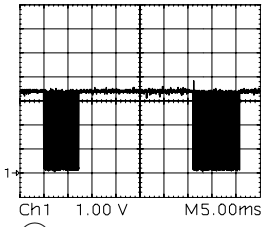
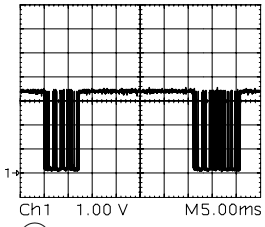


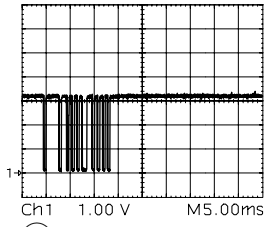
38



39 change programme



40 change programme



41 remote control

DC-Spannungen / DC Voltages

IC101 (TDA956x / OM836x)

Pin	Description	Level
1	Volume +/–	3.2V (3.2V)
2	Status 1	0V (0V)
3	Status 2	0V (0V)
4	Digital ground for u-controller	0V (0V)
5	nc.	0.75V (0.2V)
6	Standby oon/off	0V (3.9V)
7	Analog GND of text decoder and digital GND of TV processor	0V (0V)
8	SECAM PLL decoupling	2.3V (0V)
9	2nd supply voltage TV processor (8V)	8.0V (0.3V)
10	Supply voltage decoupling of digital GND of TV processor	5.0V (0V)
11	Phase 2 filter	2.7V (0V)
12	Phase 1 filter	3.9V (0V)
13	GND 3 for TV processor	0V (0V)
14	Decoupling bandgap	4.0V (0V)
15	AVL (90 versions) / East/West drive signal (110° versions)	3.0V (0.5V)
16	V-drive B output	1.0V (0V)
17	V-drive A output	1.0V (0V)
18	IF-1 input	1.8V (0V)
19	IF-2 input	1.8V (0V)
20	Reference current input	3.9V (0V)
21	Vertical sawtooth capacitor	3.8V (0V)
22	Tuner AGC output	4.3 (0V)
23	Sound IF input 1	1.9V (0V)
24	GND	0V (0V)
25	GND	0V (0V)
26	Norrow band PLL filter	2.2V (0V)
27	AVL (Automatic volume levelling)	0.4V (0V)
28	Extern Audio (audio 2) input	3.7V (0V)
29	Audio 3 input	3.7V (0V)
30	H-drive output	2.3V (0.3V)
31	Sandcastle output / horizontal fly input	0.6V (0.2V)
32	Decoupling sound demodulator	2.0V (0V)
33	QSS intercarrier output / AM output	3.4V (0.3V)
34	EHT / overvoltage protection input	2.2V (0V)
35	IF-PLL loop filter	2.4V (0V)
36	Sound IF AGC	0.5V (0V)
37	QSS output	0.6V (0V)
38	IF video / selected CVBS output	3.0V (0V)
39	Main supply voltage TV processor	8.0V (0.2V)
40	Internal CVBS input	3.8V (0V)
41	GND for TV processor	0V (0V)
42	External CVBS input	0V (0V)
43	GND for TV processor	0V (0V)
44	SVHS-Y input	3.3V (0V)
45	SVHS-C input	0V (0V)
46	White stretch capacitor	3.4V (0V)
47	CVBS output	2.8V (0V)
48	Audio output / AM audio output	3.5V (0V)
49	2nd IF video output	0.2V (0V)
50	2nd RGB / YUV insertion input	0.2V (0V)
51	Red input	2.6V (0V)
52	Green input	2.6V (0V)
53	Blue input	2.6V (0V)
54	Beam current limiter input	2.6V…3.4V (0V)
55	Black current input / V-guaard input	4.6V…5.7V (0V)
56	Red output	see oscillogr. 9
57	Green output	see oscillogr. 10
58	Blue output	see oscillogr. 11
59	Analog supply of text decoder / digital supply of TV processor	3.3V (3.3V)
60	OTP programming voltage	0V (0V)
61	Digital supply to core (3.3V)	3.3V (3.3V)
62	X-tal GND	0V (0V)
63	X-tal input	–
64	X-tal output	–
65	Programming reset	0V (0V)
66	Digital supply to periphery (3.3V)	3.3V (3.3V)
67	SCL1 (EEPROM)	3.3V (3.3V)
68	SDA1 (EEPROM)	3.3V (3.3V)
69	IR input	3.3V (3.3V)
70	nc	–
71	SCL	see oscillogr. 37
72	SDA	see oscillogr. 38
73	MSP reset (IC301)	4.9V (0V)
74	Mute	0V (3.3V)
75	SVHS switching	3.3V (3.3V)
76	L/L' switching	3.3V (3.3V)
77	F blank MM	3.3V (3.3V)
78	Program +	3.3V (3.3V)
79	CVBS sync filter	3.3V (1.8V)
80	Program -	3.3V (3.3V)

IC301 (MSP34xx)

Pin	Description	Level
1	nc	–
2	GND	0V
3	GND	0V
4	Digital control input/output	0V
5	Digital control input/output	0V
6	GND	0V
7	Standby (in normal operation it must be high)	4.9V
8	nc	4.9V
9	SCL	see oscillogr. 37
10	SDA	see oscillogr. 38
11	nc	2.4V
12	nc	2.4V
13	nc	2.4V
14	nc	4.9V
15	nc	0.7V
16	nc	0.7V
17	ADR bus clock output	0.7V
18	Digital circuit supply voltage	4.9V
19	Digital circuit supply ground	0V
20	nc	0.7V
21	nc	0V
22	nc	0V
23	nc (Ground)	0V
24	MSP RESET input	4.9V
25	Headphone sound output (R)	2.1V
26	Headphone sound output (L)	2.1V
27	Reference analog ground	0V
28	Speaker output (R)	0V…2.1V
29	Speaker output (L)	0V…2.1V
30	nc	0V…2.1V
31	nc	0V…2.1V
32	nc	0V
33	Scart 2 sound output (R)	3.7V
34	Scart 2 sound output (L)	3.7V
35	Reference analog ground	0V
36	Scart 1 sound output (R)	3.7V
37	Scart 1 sound output (L)	3.7V
38	Volume capacitor headphone	–
39	Analog supply high voltage (8V)	8.0V
40	Volume capacitor speaker	–
41	Ground for analog power supply high voltage	0V
42	Internal analog reference voltage	3.7V
43	Scart 4 input (L)	3.7V
44	Scart 4 input (R)	3.7V
45	Analog shield ground	0V
46	CINCH - sound input (L)	3.7V
47	CINCH - sound input (R)	3.7V
48	Analog shield ground	0V
49	Scart 2 sound input (L)	3.7V
50	Scart 2 sound input (R)	3.7V
51	Analog shield ground	0V
52	Scart sound 1 input (R)	3.7V
53	Scart 1 sound input (L)	3.7V
54	A/D converter reference Voltage	2.5V
55	Mono sound input	3.7V
56	Ground for analog power supply voltage	0V
57	Analog power supply voltage (5V)	4.9V
58	IF input 1	1.5V
59	IF common reference for IF IN1/IN2	1.5V
60	IF input 2	0V
61	Factory test mode enable (ground)	0V
62	Crystal osscillator input	2.3V
63	Crystal osscillator output	2.3V
64	nc (Ground)	0V

IC303, IC304 (TDA7263)

Pin	Description	Level
1	Left in	1.6V
2	Left in V	1.6V
3	Mute	15.3V
4	Right in V	1.6V
5	Right in	1.6V
6	GND	0V
7	nc	–
8	Right out	14.2V
9	VSS	28.0V
10	Left out	13.9V
11	nc	–
12	Left in	1.6V
13	Mute	15.3V
14	Right in	1.6V
15	nc	–
16	VSS	28.0V
17	nc	–

IC501 (TDA835x)

Pin	Description	Level
1	Input A	1.0V (0V)
2	Input B	0.9V (0V)
3	Supply voltage	14.7V (0V)
4	Output B	7.6V (0.4V)
5	GND	0V (0V)
6	Vertical flyback supply voltage	45.6V (10.9V)
7	Output A	7.6V (0V)
8	Guard output	0.3V (0V)
9	Feedback input	7.9V (0V)

IC601 (MC44608)

Pin	Description	Level
1	Demag	0.9V (0.0V)
2	I sense	01V (0.3V)
3	Control input	5V (5.5V)
4	GND	0V (0V)
5	Driver	2.1V (0.1V)
6	VCC	12.3V (8.8V)
7	nc	–
8	VI	117V (117V)

IC701 (TDA6107)

Pin	Description	Level
1	Red in	2.3V…2.5V
2	Green in	2.5V…2.7V
3	Blue in	2.5V…2.7V
4	GND	0V
5	Black current output	4.5V…5.5V
6	VDD supply	190V
7	Red out	134V…137V
8	Green out	128V…130V
9	Blue out	130V…137V

(*) standby mode

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GREENVILLE 7008/5 TOP

MATERIAL-NR. / PART NO.: 720126003200
BESTELL-NR. / ORDER NO.: GBB3800 SCHWARZ/BLACK

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		720126003200		GREENVILLE 7008/5TOP BLACK KEIN E-TEIL	GREENVILLE 7008/5TOP BLACK NO SPARE PART
0001.000		759550942700		GEHAEUSEVORDERTEIL SCHWARZ	FRONT CABINET BLACK
0002.000		759550942800		RUECKWAND DKL. GRAU	BACK COVER DAR GREY
0005.000		759550932200		FUSS	FOOT
0006.000		759550942900		KNOPF NETZSCHALTER	KNOPF POWER SWITCH
0007.000		759550943000		KNOPF PROGRAMM/VOLUMEN	KNOB PROGRAM/VOLUME
0010.000		759550941100		LAUTSPRECHER 8 OHM/15W/25W	SPEAKER 8 OHM/15W/25W
0013.000		759550942500		ENTMAGNETISIERUNGSSPULE	DEGAUSSING COIL
0014.000	⚠	759550450200		NETZKABEL	POWER CABLE
0015.000	⚠	759550942600		SCHALTER NETZ	POWER SWITCH
0025.000		759550943200		BILDROEHRE VC A66EHJ13X62	PICTURE TUBE VC A66EHJ13X62
0027.000		720117132900		FERNBEDIENUNG TP160	REMOTE CONTROL TP160
0028.000	⚠	275990120700	X	LP CHASSISMODUL KEIN E-TEIL	CHASSISBOARD NO SPARE PART
0070.000		275990033200		LP-BEDIENMODUL	CONTROL BOARD
		720117018000		BEDIENUNGSANLEITUNG D/DK/N/S	INSTRUCTION MANUAL D/DK/N/S
		720100500000		SERVICE MANUAL D/GB	SERVICE MANUAL D/GB
				X = SIEHE GESONDERTE E-LISTE	X = SEE SEPARATE PARTS LIST

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

GRUNDIG

Ersatzteilliste
Spare Parts List

TV

12 / 2003

SEDANCE 70 ST 70-2405/5 TOP

MATERIAL-NR. / PART NO.: 720126002800
BESTELL-NR. / ORDER NO.: GBB4400 SILBER/SILVER

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		720126002800		SEDANCE 70 ST 70-2405/5 TOP SILBER KEIN E-TEIL	SEDANCE 70 ST 70-2405/5 TOP SILVER NO SPARE PART
0001.000		759550947000		GEHAEUSEVORDERTEIL SILBER	FRONT CABINET SILVER
0003.000		759550946900		RUECKWAND SILBER	BACK COVER SILVER
0004.000		759550946700		KNOPF NETZ	KNOB POWER
0010.000		759550941100		LAUTSPRECHER 8 OHM/15W/25W	SPEAKER 8 OHM/15W/25W
0012.000		759550946800		KNOPF PROGRAMM/VOLUMEN	KNOB PROGRAMM/VOLUME
0013.000		759550942500		ENTMAGNETISIERUNGSSPULE	DEGAUSSING COIL
0014.000	⚠	759550450200		NETZKABEL	POWER CABLE
0015.000	⚠	759550941600		SCHALTER NETZ	POWER SWITCH
0025.000		759550943200		BILDROEHRE VC A66EHJ13X62	PICTURE TUBE VC A66EHJ13X62
0027.000		720117132900		FERNBEDIENUNG TP160	REMOTE CONTROL TP160
0028.000	⚠	275990120900	X	LP-CHASSISMODUL KEIN E-TEIL	CHASSISBOARD NO SPARE PART
0070.000		275990033200		LP-BEDIENMODUL	CONTROL BOARD
		720117017500		BEDIENUNGSANLEITUNG D/GB/I/I/NL	INSTRUCTION MANUAL D/GB/I/I/NL
		720117017600		BEDIENUNGSANLEITUNG DK/N/S/P	INSTRUCTION MANUAL DK/N/S/P
		720117017700		BEDIENUNGSANLEITUNG FIN/CZ/H	INSTRUCTION MANUAL FIN/CZ/H
		720100500000		SERVICE MANUAL D/GB	SERVICE MANUAL D/GB
				X = SIEHE GESONDERTE E-LISTE	X = SEE SEPARATE PARTS LIST

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

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ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

GRUNDIG

Ersatzteilliste
Spare Parts List

TV

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LP-CHASSISMODUL
CHASSISBOARD

MATERIAL-NR. / PART NO.: 275990120700

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		275990120700		LP-CHASSISMODUL KEIN E-TEIL	CHASSISBOARD NO SPARE PART

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
C 601	⚠ 759550459000	KONDENS 220NF275V-AC
C 616	⚠ 759880450800	KONDENS. 2.2NF 20% 250V
D 401	833021514800	MELF DIODE 1N4148
D 402	833021514800	MELF DIODE 1N4148
D 402	833021514800	MELF DIODE 1N4148
D 503	830953414900	MELF-DIODE LL 4148 TFK/ITT
D 504	830953414900	MELF-DIODE LL 4148 TFK/ITT
D 505	833021514800	MELF DIODE 1N4148
D 507	830920422800	DIODE BY228 PHI/GI/TFK
D 508	759550944200	DIODE RGP 30K
D 509	830921512700	DIODE 1 N 4007 -GA
D 510	830920100500	DIODE BA157 AV619 -AMMO
D 511	830920100500	DIODE BA157 AV619 -AMMO
D 512	830920100500	DIODE BA157 AV619 -AMMO
D 513	759880511100	DIODE RGP15J
D 514	830953414900	MELF-DIODE LL 4148 TFK/ITT
D 515	830920002100	DIODE BAV21 ITT/ TFK AV619
D 601	830956550700	DIODE RGP10J/1N4937 MOT/GP
D 602	725511823600	DIODE RF2007
D 603	725511823600	DIODE RF2007
D 604	725511823600	DIODE RF2007
D 605	725511823600	DIODE RF2007
D 607	759550920400	DIODE RGP10G
D 609	759550921900	DIODE UF4006
D 611	759550455400	DIODE RGP30MS
D 612	759550944700	DIODE RGP 50D
D 613	759550543400	DIODE RGP30D
D 614	759550920400	DIODE RGP10G
D 615	830956550700	DIODE RGP10J/1N4937 MOT/GP
D 616	830953414900	MELF-DIODE LL 4148 TFK/ITT
D 701	830921512700	DIODE 1 N 4007 -GA
D 702	830920002100	DIODE BAV21 ITT/ TFK AV619
D 703	830920002100	DIODE BAV21 ITT/ TFK AV619
D 704	830920002100	DIODE BAV21 ITT/ TFK AV619
F 101	759550450500	FILTER OWA J1985M
F 105	759550457600	SPULE 1UH K LAL03
IC 101	759550945200	IC OM8363 (96K) T&R
IC 102	830520145300	IC 4053B/ 14053BCP
IC 301	759550939600	IC MSP3410G B8 V3
IC 302	759550945000	IC L78L05 ACZ
IC 304	830533726300	IC TDA7263 SGS
IC 401	759550945200	IC OM8363 (96K) T&R
IC 501	759550943300	IC TDA 8359 J/N2A

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
IC 601	759550945400	IC MC 44608P40
IC 602	759550454000	IC TDB7805CT
IC 603	759550924900	IC KA 317 TU
IC 604	759550924900	IC KA 317 TU
IC 701	830533610800	IC TDA6108JF SOT111-1 PHI
L 101	759862006100	DR 0309 10UH 4-253T-15020
L 102	759550451600	SMD SPULE 1UH
L 105	759550451600	SMD SPULE 1UH
L 106	759550451600	SMD SPULE 1UH
L 201	759550451700	SMD SPULE 18UH K/12
L 202	759550451700	SMD SPULE 18UH K/12
L 401	759862006100	DR 0309 10UH 4-253T-15020
L 402	759862006100	DR 0309 10UH 4-253T-15020
L 501	759550944000	SPULE 6 MH E/W
L 502	759550944400	SPULE 30 UH
L 503	759550944500	BRUECKENSPULE 1.5MH
L 601	⚠ 759550945600	FILTER 18 MH
L 603	759550924000	SPULE 4.7UH
L 604	759550922600	SPULE 50UH
L 701	759550451500	SPULE 10UH R0814
P 601	759550927600	ESTR 10K
PH 601	⚠ 759550922100	OPTOKOPPLER SFH617
Q 301	759550926200	QUARZ 18.432 MHZ
Q 401	759550944800	QUARZ 12 MHZ
R 341	⚠ 759550945500	WIDERST. 1 OHM 1.5 W
R 503	⚠ 759550453000	WIDERST 22OHM1/2W
R 516	⚠ 759550455300	WIDERST 4,7OHM1W
R 522	⚠ 759550945800	WIDERST. 4.7 OHM 0.5 W
R 601	759550453200	NTC WIDERST 5,1OHM
R 602	⚠ 759550457500	PTC 9OHM 2PIN (R607)
R 610	⚠ 759550452600	WIDERST 4,7MOHM1/2W
R 612	⚠ 759550452700	WIDERST 0,1OHM0,4W
S 602	⚠ 759836610000	SICHERUNG T2A/250V QFS-C202
S 603	⚠ 727006351900	SICHERUNG SI 5X20 T4A
ST 601	⚠ 831562150300	SI 5X20 T2,5A H 250V
SK 201	759550922900	EURO AV BUCHSE
SK 202	759550922900	EURO AV BUCHSE

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
T 103	830100484800	SMD TRANS BC848B/ BC847B P
T 104	830100484800	SMD TRANS BC848B/ BC847B P
T 105	830100484800	SMD TRANS BC848B/ BC847B P
T 106	830100484800	SMD TRANS BC848B/ BC847B P
T 110	830100484800	SMD TRANS BC848B/ BC847B P
T 301	830100385800	SMD TRANS BC858B/ BC857B P
T 303	830100385800	SMD TRANS BC858B/ BC857B P
T 305	830100385800	SMD TRANS BC858B/ BC857B P
T 306	830220055800	TRANS.BC 558 B
T 307	830100484800	SMD TRANS BC848B/ BC847B P
T 308	830100385800	SMD TRANS BC858B/ BC857B P
T 309	830220055800	TRANS.BC 558 B
T 401	830100484800	SMD TRANS BC848B/ BC847B P
T 403	830100484800	SMD TRANS BC848B/ BC847B P
T 503	759550945100	TRANS BC 618
T 504	830290002000	TRANS S2055N TOS/ BU508DF P
T 601	759550944600	TRANS 2 SK 2545
T 603	830100484800	SMD TRANS BC848B/ BC847B P
T 604	830100484800	SMD TRANS BC848B/ BC847B P
T 605	830100484800	SMD TRANS BC848B/ BC847B P
T 606	830100484800	SMD TRANS BC848B/ BC847B P
T 607	830100484800	SMD TRANS BC848B/ BC847B P
TH 601	759880944900	TYRISTOR MCR 22-8
TR 501	759550944100	TREIBER TRAFO 11.1
TR 502	⚠ 759550944300	TRAFO FBT 21" 14.2
TR 601	⚠ 759550945700	TRAFO SMT 21"
TR 602	⚠ 759550946300	SPULE 56 MH DTH30563H
TU 101	759550938800	TUNER UV1316/ALG-3 SV22 ASY
X 703	⚠ 759550581000	BILDROHRFASSUNG ISHMO5S
ZD 501	830970755500	Z DIODE ZPD 15 ITT/BZX 55 C
ZD 502	759550453400	Z- DIODE UZT33V
ZD 602	830544043100	IC TL431CLPRP MOT AV330 ER-
ZD 603	759880654600	Z-DIODE MTZJ12B
ZD 606	759550923400	DIODE BZX55C9V1

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

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The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

GRUNDIG

Ersatzteilliste
Spare Parts List

TV

12 / 2003

LP-CHASSISMODUL
CHASSISBOARD

MATERIAL-NR. / PART NO.: 275990120900

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		275990120900		LP-CHASSISMODUL KEIN E-TEIL	CHASSISBOARD NO SPARE PART

POS. NR. POS. NO.		MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
C 601	⚠	759550459000	KONDENS 220NF275V-AC
C 616	⚠	759880450800	KONDENS. 2.2NF 20% 250V
D 401		833021514800	MELF DIODE 1N4148
D 402		833021514800	MELF DIODE 1N4148
D 503		830953414900	MELF-DIODE LL 4148 TFK/ITT
D 504		830953414900	MELF-DIODE LL 4148 TFK/ITT
D 505		833021514800	MELF DIODE 1N4148
D 507		830920422800	DIODE BY228 PHI/GI/TFK
D 508		759550944200	DIODE RGP 30K
D 509		830921512700	DIODE 1 N 4007 -GA
D 510		830920100500	DIODE BA157 AV619 -AMMO
D 511		830920100500	DIODE BA157 AV619 -AMMO
D 512		830920100500	DIODE BA157 AV619 -AMMO
D 513		759880511100	DIODE RGP15J
D 514		830953414900	MELF-DIODE LL 4148 TFK/ITT
D 515		830920002100	DIODE BAV21 ITT/ TFK AV619
D 601		830956550700	DIODE RGP10J/1N4937 MOT/GP
D 602		725511823600	DIODE RF2007
D 603		725511823600	DIODE RF2007
D 604		725511823600	DIODE RF2007
D 605		725511823600	DIODE RF2007
D 607		759550920400	DIODE RGP10G
D 609		759550921900	DIODE UF4006
D 611		759550455400	DIODE RGP30MS
D 612		759550944700	DIODE RGP 50D
D 613		759550543400	DIODE RGP30D
D 614		759550920400	DIODE RGP10G
D 615		830956550700	DIODE RGP10J/1N4937 MOT/GP
D 701		830921512700	DIODE 1 N 4007 -GA
D 702		830920002100	DIODE BAV21 ITT/ TFK AV619
D 703		830920002100	DIODE BAV21 ITT/ TFK AV619
D 704		830920002100	DIODE BAV21 ITT/ TFK AV619
F 101		759550450500	FILTER OWA J1985M
F 104		759550946000	FILTER SER TPSRD5M50W00-AO
F 105		759550457600	SPULE 1UH K LAL03
IC 101		759550945200	IC OM8363 (96K) T&R
IC 102		830520145300	IC 4053B/ 14053BCP
IC 301		759550939600	IC MSP3410G B8 V3
IC 302		759550945000	IC L78L05 ACZ
IC 304		759550946600	IC TDA 7263
IC 401		759550952200	IC AT24C08AN-10SI-2:7
IC 501		759550943300	IC TDA 8359 J/N2A

POS. NR. POS. NO.		MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
IC 601		759550945400	IC MC 44608P40
IC 602		759550454000	IC TDB7805CT
IC 603		759550924900	IC KA 317 TU
IC 604		759550924900	IC KA 317 TU
IC 701		830533610800	IC TDA6108JF SOT111-1 PHI
IC 901		830546183600	IC TSOP1836/ TSOP4836 VISH
L 101		759862006100	DR 0309 10UH 4-253T-15020
L 202		759550451700	SMD SPULE 18UH K/12
L 302		759862006100	DR 0309 10UH 4-253T-15020
L 303		759550451700	SMD SPULE 18UH K/12
L 401		759862006100	DR 0309 10UH 4-253T-15020
L 402		759862006100	DR 0309 10UH 4-253T-15020
L 501		759550920800	SPULE 6MH
L 503		759550946200	BRUECKENDIODE 1.5MH
L 601	⚠	759550945600	FILTER 18 MH
L 603		759550924000	SPULE 4.7UH
L 604		759550922600	SPULE 50UH
L 701		759550451500	SPULE 10UH R0814
P 601		759550927600	ESTR 10K
PH 601	⚠	759550922100	OPTOKOPPLER SFH617
Q 301		759550923000	QUARZ 18.432MHZ
Q 401		759550944800	QUARZ 12 MHZ
R 341	⚠	759550945500	WIDERST. 1 OHM 1.5 W
R 503	⚠	759550453000	WIDERST 22OHM1/2W
R 516	⚠	759550455300	WIDERST 4,7OHM1W
R 522	⚠	759550945800	WIDERST. 4.7 OHM 0.5 W
R 601		759550453200	NTC WIDERST 5,1OHM
R 602	⚠	759550457500	PTC 9OHM 2PIN (R607)
R 610	⚠	759550452600	WIDERST 4,7MOHM1/2W
R 612	⚠	759550452700	WIDERST 0,1OHM0,4W
S 602	⚠	759836610000	SICHERUNG T2A/250V QFS-C202
S 603	⚠	727006351900	SICHERUNG SI 5X20 T4A
ST 601	⚠	831562150300	SI 5X20 T2,5A H 250V
SK 201		759550922900	EURO AV BUCHSE
SK 202		759550922900	EURO AV BUCHSE

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

POS. NR. POS. NO.		MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
T 103		830100484800	SMD TRANS BC848B/ BC847B P
T 103		830100484700	SMD TRANS BC847B
T 104		830100484700	SMD TRANS BC847B
T 104		830100484800	SMD TRANS BC848B/ BC847B P
T 105		830100484700	SMD TRANS BC847B
T 105		830100484800	SMD TRANS BC848B/ BC847B P
T 106		830100484800	SMD TRANS BC848B/ BC847B P
T 106		830100484700	SMD TRANS BC847B
T 110A		830100484800	SMD TRANS BC848B/ BC847B P
T 301		830100385800	SMD TRANS BC858B/ BC857B P
T 303		830100385800	SMD TRANS BC858B/ BC857B P
T 305		830100385800	SMD TRANS BC858B/ BC857B P
T 306		830220055800	TRANS.BC 558 B
T 307		830100484800	SMD TRANS BC848B/ BC847B P
T 308		830100385800	SMD TRANS BC858B/ BC857B P
T 309		830220055800	TRANS.BC 558 B
T 401		830100484800	SMD TRANS BC848B/ BC847B P
T 403		830100484800	SMD TRANS BC848B/ BC847B P
T 501		759550945900	TRANS 2SK2381
T 503		759550945000	TRANS L78L05 ACZ
T 504		830290002000	TRANS S2055N TOS/ BU508DF P
T 601		759550946500	TRANS 2SK2545
T 603		830100484800	SMD TRANS BC848B/ BC847B P
T 604		830100484800	SMD TRANS BC848B/ BC847B P
T 605		830100484800	SMD TRANS BC848B/ BC847B P
T 606		830100484800	SMD TRANS BC848B/ BC847B P
T 607		830100484800	SMD TRANS BC848B/ BC847B P
TH 601		759880944900	TYRISTOR MCR 22-8
TR 501		759550944100	TREIBER TRAFO 11.1
TR 502	⚠	759550944300	TRAFO FBT 21" 14.2
TR 601	⚠	759550945700	TRAFO SMT 21"
TR 602	⚠	759550946300	SPULE 56 MH DTH30563H
TU 101		759550938800	TUNER UV1316/ALG-3 SV22ASYM
X 703	⚠	759550581000	BILDROHRFASSUNG ISHMO5S
ZD 501		830970755500	Z DIODE ZPD 15 ITT/BZX 55 C
ZD 502		759550453400	Z- DIODE UZT33V
ZD 602		830544043100	IC TL431CLPRP MOT AV330 ER-
ZD 603		759880654600	Z-DIODE MTZJ12B
ZD 606		759550923400	DIODE BZX55C9V1

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION

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⚠ (!)

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ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION